MALCOLM PIRNIE

FILE COPY

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

COMPLETED

Pacific Vegetable Oil/International — Site Name

124 — Site ID Number

416 Division Street — Address

Boonton, NJ 07005 — City, State

Date of Off-Site Reconnaissance: February 7, 1985

SITE DESCRIPTION Pacific Vegetable Oil processed vegetable oils at this site from 1971 to 1980. Kay Corporation reportedly purchased the property and is now demolishing the plant for resale. In addition to extensive handling of natural plant compounds, a nickel catalyst was used extensively in manufacturing processes. Organic solvents were apparently used for cleaning. Compounds used were disposed of in unlined pits and drums. As of 1983, Pacific Vegetable Oil was apparently complying closely with DWM for clean-up operations. Groundwater samples indicate some high concentrations of heavy metals, especially nickel.

PRIORITY FOR FURTHER ACTION: High ____ Medium X Low ____ None ____

RECOMMENDATIONS Groundwater sampling and a clean-up inspection should be conducted at this site if not already conducted in recent months. Remaining drums observed during off-site inspection should be accounted for. Also, any off-site well construction details and water quality data should be made available.

Prepared by: Tom Fowler — Date: February 12, 1985

MALCOLM PIRNIE X

JRB ASSOCIATES ____

SAFE INTERNATIONAL ____

YURASEK ASSOCIATES ____

249025

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

EPA

I. IDENTIFICATION
01 STATE: NJ | 02 SITE NUMBER:

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
Pacific Vegetable Oil/International	416 Division Street				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG DIST**
Boonton	NJ	07005	Morris		
09 COORDINATES LATITUDE: 40° 54' 30.0"	LONGITUDE: 74° 24' 05.0"	Block 69, 2	Lot 42, 1		

10 DIRECTIONS TO SITE (Starting from nearest public road)
Take Route I-287 to Boonton exit (about 2 miles north of I-80). Make a right onto Division Street (about 0.1 mile west of I-287). Pacific Vegetable Oil is on both sides of Division Street about 0.5 miles north.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)			
Pacific Vegetable Oil/International Inc.	416 Division Street			
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 TELEPHONE NUMBER**	
Boonton	NJ	07005	(201) 334-2902	
07 OPERATOR (If known and different from owner)	**08 STREET** (Business, mailing, residential)			
Kay Corporation	unknown			
09 CITY	**10 STATE**	**11 ZIP CODE**	**12 TELEPHONE NUMBER**	
			( )	

13 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
☐ A. RCRA 3001 DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☒ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☒ YES ☐ NO DATE 8/9/83 (MONTH DAY YEAR)

BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ☒ C. STATE ☐ D. OTHER CONTRACTOR
☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)
☐ A. ACTIVE ☒ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION
1971 (BEGINNING YEAR) | 1980 (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Vegetable oils and organic and inorganic compounds involved in this processing have been disposed in drums and pits. The nickel catalyst is of special concern. Transformer oil contamination is possible. General spillage of products and feedstock are possible. (Attachments A thru G)

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Contamination to ground water on-site poses a potential threat to Boonton Reservoir and domestic wells in the region.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☒ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)			03 TELEPHONE NUMBER
Fred Schmitt	NJDEP/BEERA			(609 292-1215
04 PERSON RESPONSIBLE FOR ASSESSMENT	**05 AGENCY**	**06 ORGANIZATION**	**07 TELEPHONE NUMBER**	**08 DATE**
Tom Fowler		Malcolm Pirnie, Inc.	(201) 845-0400	2/12/85 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [X] A. SOLID
- [ ] B. POWDER, FINES
- [X] C. SLUDGE
- [ ] D. OTHER (Specify)
- [ ] E. SLURRY
- [X] F. LIQUID
- [ ] G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS:
CUBIC YARDS: unknown
NO. OF DRUMS:

03 WASTE CHARACTERISTICS (Check all that apply)

- [X] A. TOXIC
- [ ] B. CORROSIVE
- [ ] C. RADIOACTIVE
- [ ] D. PERSISTENT
- [ ] E. SOLUBLE
- [ ] F. INFECTIOUS
- [ ] G. FLAMMABLE
- [ ] H. IGNITABLE
- [ ] I. HIGHLY VOLATILE
- [ ] J. EXPLOSIVE
- [ ] K. REACTIVE
- [ ] L. INCOMPATIBLE
- [ ] M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE	unknown		Nonpetroleum oils in drums
SOL	SOLVENTS			and pits. Volatiles detected
PSD	PESTICIDES			in monitoring wells.
OCC	OTHER ORGANIC CHEMICALS	unknown		Used in vegetable oil refining
IOC	INORGANIC CHEMICALS	unknown		Used in vegetable oil refining
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS	unknown		Nickel catalyst in drums and pits.

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
MES	Nickel	7440-02-0	Unlined pits	12,565	ppb
SOL	Chlorobenzene	108-90-7	Unlined pits	336	ppb
SOL	Dichlorobenzene	25321-22-6	Unlined pits	>300	ppb
OCC	Polychlorinated Biphenyls	11097-69-1	Transformer Oil	unknown	
SOL	Toluene	108-88-3	Pit inside Ester Bldg.	6,400	ppb
SOL	N-butylbenzene	999	"	2,100	ppb
SOL	N-propylbenzene	999	"	1,700	ppb
	Attachments B,C and F				

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NJDEP/HSMA, DWR: (Attachments B,C, and F)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NJ	

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [X] OBSERVED (DATE: 12/19/83) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Well test results show contamination of groundwater on-site. Contamination of water flow path to reservoir(within 1 mile to south) is possible, as is flow in fractured bedrock, which is domestic well supply. Status of cleanup is not documented. (Attachments F and G)

01 [X] B. SURFACE WATER CONTAMINATION — 02 [X] OBSERVED (DATE: 4/5/82 & 12/19/83) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Surface water contamination on-site is documented. Off-site contamination has not been documented, nor have cleanup operations. (Attachments A,B,F, and G)

01 [ ] C. CONTAMINATION OF AIR — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

01 [ ] D. FIRE/EXPLOSIVE CONDITIONS — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

01 [X] E. DIRECT CONTACT — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Surface water contamination on-site is documented. Potential exists for direct contact with employees. (Attachments A,B,F,G)

01 [X] F. CONTAMINATION OF SOIL — 02 [X] OBSERVED (DATE: 9/23/82) — [ ] POTENTIAL — [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: 200 (Acres) — 04 NARRATIVE DESCRIPTION

Extensive use of pits for contaminated liquid handling and several spills have been noted. Soil contamination is documented. (Attachments C and G)

01 [X] G. DRINKING WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Contamination of water flow path to reservoir (within 1 mile to south) is possible, as is flow in fractured bedrock, which is used as domestic well supply.

(Attachments F and G)

01 [X] H. WORKER EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 WORKERS POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

Surface water on-site is documented. A potential exists for worker exposure. ((Attachment A,B,F,G)

01 [X] I. POPULATION EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

A potential exists for direct and indirect exposure to contaminated surface waters. (Attachments F,G)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: NJ | 02 SITE NUMBER:

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids/leaking drums) — 02 ☒ OBSERVED (DATE: 9/23/82) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
Use of unlined pits for process wastes apparently has introduced soil and groundwater contamination. (Attachments B,F, and G)

01 ☒ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
The potential exists for contamination of off-site wells and of the Boonton Reservoir. (Attachments F and G)

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

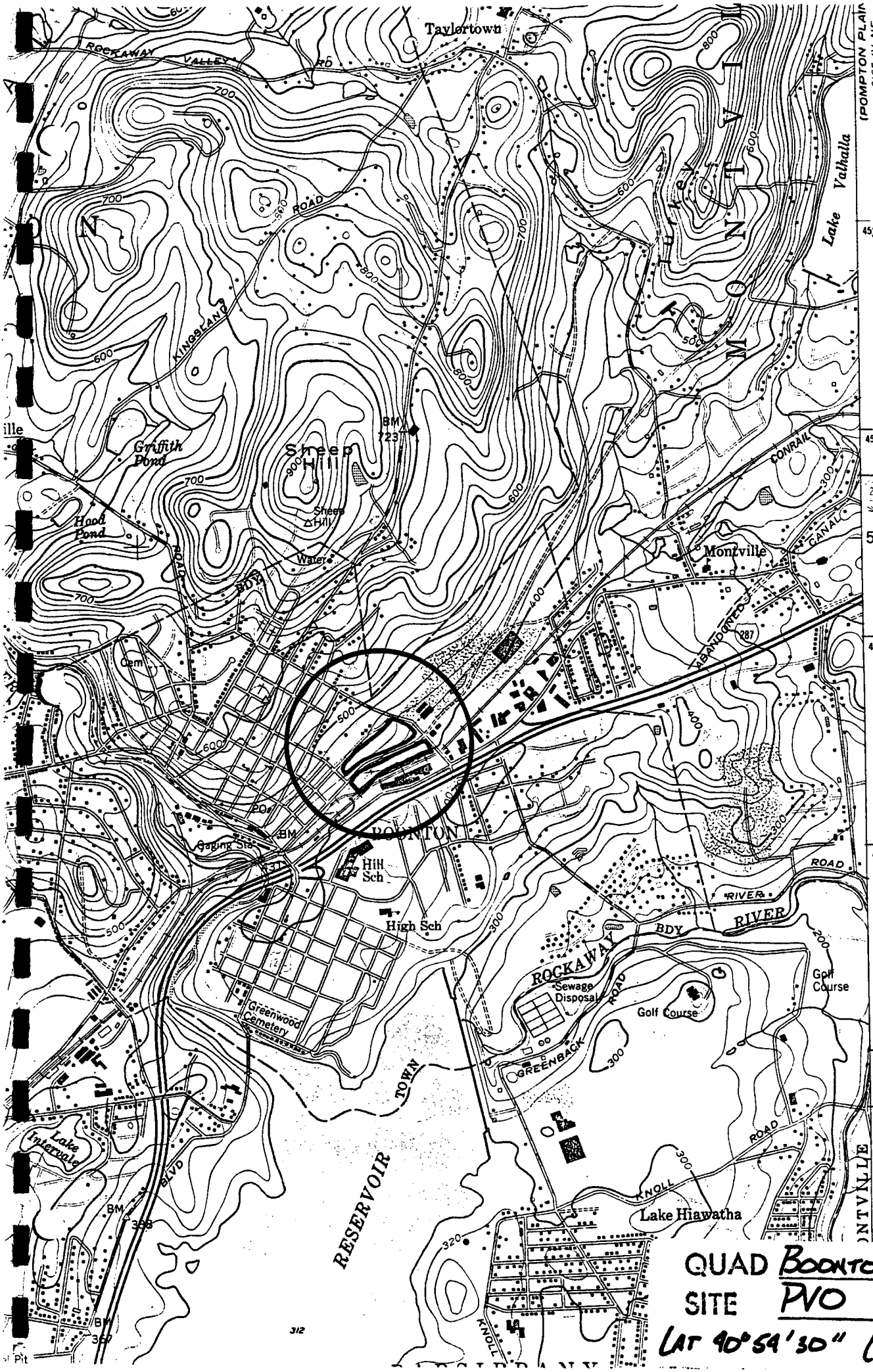
01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☒ OBSERVED (DATE: 9/23/82) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
The facility used unlined pits for process wastes. (Attachments B,F, and G)

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: _____

IV. COMMENTS
Sealed drums with brown streaks on sides remain on south side near loading dock. No data available since 1983.

V. SOURCES OF INFORMATION (Cite specific references, e g., state files, sample analysis, reports)
NJDEP/HSMA, DWR files: Attachments A thru G



QUAD Boonton

SITE PVO

LAT 40°54'30" LONG 74°24'05"

Attachment F

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WATER RESOURCES
P. O. BOX CN 029
TRENTON, NEW JERSEY 08625

ARNOLD SCHIFFMAN
DIRECTOR

APR 5 1982

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Henry Melekevitz
Pacific Vegetable Oil
416 Division Street
Boonton, New Jersey 07005

RE: Clean-Up Operations at Pacific Vegetable Oil
Boonton Borough, Morris County

Dear Mr. Melekevitz:

This office is aware that Pacific Vegetable Oil (PVO) is in the process of dismantling part of its Boonton Plant. Inspections conducted by this office have determined that PVO has carelessly dumped pollutants, such as waste products and spent nickel catylist, throughout the plant site. Investigations by this Department have also determined that these poor housekeeping practices have caused a deterioration of water quality in nearby streams. Water samples collected from two streams (attached - identified as "west drainage" or stream B and "east drainage" or stream C) which flow through the facility show an increase in nickel and other pollutants at sampling locations downstream of the facility as compared to upstream sampling locations. (This Department has listed nickel as a hazardous substance pursuant to N.J.A.C. 7:1E-1.3(j).) These stream sampling results are attached and are also summarized in the attached tables 1 and 2. The sampling locations are indicated in attached figure 1. In addition, results of samples (attached No.'s 08869 and 08928) collected at two locations from surface water runoff draining an area of PVO's plant site south of Division Avenue show high levels of chemical oxygen demand (COD) and total dissolved solids (TDS) (see figure 1).

These findings indicate that PVO is discharging pollutants into Crooked Brook, in violation of N.J.S.A. 58:10A-1 et seq., as well as the Consent Order which PVO entered into with the State of New Jersey under the auspices of the Chancery Division, Docket No. C-357-68, on November 30, 1972. Besides these water pollution violations, inspections by representatives of this Department have also revealed that the storage of wastes in pits, drums and tanks at the facility is in violation of this Department's Solid Waste regulations, promulgated pursuant to N.J.S.A. 13:1E-1 et seq.

ATTACHMENT A

A1

Therefore, in order to correct these deficiencies and to prevent future discharges by PVO into the surface and ground waters, this Department hereby directs PVO to take the following actions:

1. PVO shall remove all spillages and contaminated soils in a manner and to a location approved by this Department's Solid Waste Administration by May 1, 1982. This clean-up shall include, but shall not be limited to, the following areas:

(a) Spillages behind the Spray Tower Building (South of Division Avenue);

(b) Spillages and other contaminated materials in the area south of the Recovery Tank (South of Division Avenue);

(c) Spillages inside the Pilot Plant Building near the area where wastes were transferred to the railroad cars (South of Division Avenue);

(d) Black material near Building No. 4 (South of Division Avenue);

(e) Contaminated material in the streams identified as A, B and C (including the black material in the oil/water separator in streams A and B);

(f) Spillages of nickel near the Nickel Catylist Building;

(g) Spillages surrounding several areas where PVO stores drums.

2. PVO shall remove all contaminated liquid and solid materials from all pits located north of Division Avenue by May 1, 1982. The pits requiring clean-up include, but are not limited to, the following:

(a) The three pits located near the nickel catylist building (results of the water samples from these pits are attached and are numbered 0SSS0, 0SSS2, 0SSS3 and 0SSS4, and figure 2 also attached, shows the location of these pits. (Sample 0SSS0 indicates the liquid in a pit contains arsenic in addition to nickel.)

(b) Two pits (approximately 1 foot square) in the Ester Building (results of these samples are attached and are numbered 0SS02 and 0SS03).

PVO shall give this office five (5) days notice of any operations to remove material from these pits so that a representative of the Department may be present. After the pits have been emptied, PVO shall dismantle the pits so that the Department can determine if it is likely that any wastes stored within these pits have contaminated soils and/or the ground water.

3. PVO shall remove all contaminated liquid and solid materials from all tanks in the following manner:

A2

(a) PVO must remove all material from all tanks (including but not limited to several large wooden tanks, several tanks inside the Ester Building and the Refinery Building, an above ground fuel oil tank, and three below ground storage tanks) scheduled for demolition, in a manner and to a location approved by the Solid Waste Administration, by May 15, 1982. Accordingly, PVO shall submit by June 1, 1982, a report which gives documentation that PVO has satisfactorily complied with this requirement. This report shall include the date each tank scheduled for demolition was inspected and the amount and the chemical name of any materials stored inside each tank. The report shall also specify the location of each of these tanks. (Results of liquid samples collected from several wooden tanks near the Nickel Catylist Building are attached and numbered 08885, 08886, 08887, 08888 and 08889. Figure 2 in the attachment shows the location of these tanks.)

(b) If workmen encounter material during the dismantling of a tank, the material must be placed in a secure container and properly removed to an approved offsite location within thirty (30) days.

(c) PVO previously reported to this Division that most of the tanks located south of Division Avenue are not scheduled for demolition in the foreseeable future. Since these tanks do not pose an immediate threat to the surface or ground waters, PVO shall submit for approval, by June 1, 1982, a schedule for the inspection of these tanks and the removal of all materials stored within them.

addition, a representative of the Department has collected water samples from two concrete pits in the southwest region of the facility. You will be advised of the results as soon as the Department receives them.

4. PVO shall take the following steps to assure the proper disposal of the (over 600) drums of waste currently stored onsite:

(a) PVO shall immediately place covers on all drums and shall place the contents of all leaking and overflowing drums into secure containers.

(b) PVO shall move all empty drums to one location onsite.

(c) PVO shall consolidate all drums containing wastes in one location (all drums in poor condition shall be placed into building No. 72).

(d) All drummed waste material shall be removed to offsite locations approved by the Department's Solid Waste Administration by May 15, 1982.

(e) PVO shall provide an inventory of material onsite in 1980 and an inventory of all material presently onsite.

(f) PVO shall provide copies of manifests and/or sale receipts of all waste shipments from PVO since the plant's closure.

A3

5. PVO shall also collect grab water samples twice monthly from the streams running through the facility at the five locations shown in figure 3. The samples shall be analyzed for BOD_5, COD and nickel. One sampling per month shall be collected during a significant precipitation event. This sampling shall continue until this Department has obtained sufficient evidence to determine that PVO is no longer discharging pollutants into the streams; however; sampling shall not be discontinued in any event until all required clean-up operations are completed.

6. PVO is required to submit documentation that none of the transformers onsite, formerly drained of PCB's, currently contain that chemical.

7. PVO is hereby advised that, based on the aquisition and analyses of further data, ground water monitoring wells and/or a complete geohydrological study to assess the nature and extent of ground water contamination attributable to the operations of PVO, may be required by this Division.

Finally, be advised that if PVO fails to comply in a satisfactory and a timely fashion with all the terms of this directive, the Department will initiate appropriate actions to enforce the 1972 Consent Order. Furthermore, failure to comply with this letter may result in the assessment of substantial monetary penalties against PVO, pursuant to the New Jersey Water Pollution Control Act, N.J.S.A. 58:10A-1 et seq., and for penalties as provided for in this Department's Solid Waste regulations. Finally, be advised that compliance with this directive does not exempt PVO from the responsibility of compliance with any other applicable rules or regulations of the Department.

All submission of information required by this directive shall be mailed to the writer at the above address. Should you have any questions concerning this directive, please contact Mr. Gregory Cunningham of this office at (609) 292-0577.

Very truly yours,
ORIGINAL SIGNED BY

Joseph A. Miller, Assistant Chief
Region IV
Enforcement & Regulatory Services

cc: Joseph M. Mikulka, Chief, Region IV
Gregory Cunningham, Region IV
Timothy Stone, Bureau of Ground Water Management
Edward Stevenson, Cancer & Toxic Substances Research
Robert Mueller, Cancer & Toxic Substances Research
Steven Carfora, Bureau of Hazardous Waste
Alfonzo Ianuzzi, Bureau of Hazardous Waste
Edward Putman, Division of Hazard Management
Keith Onsdorff, Office of Enforcement
Steven Austin, Boonton Board of Health
Donald Mathews, Kay Corporation
A20:G1

A4

Ed Putnam
Landon Lites
Yardville 126

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF WATER RESOURCES
P. O. BOX CN 029
TRENTON, NEW JERSEY 08625

ARNOLD SCHIFFMAN
DIRECTOR

JUL 1 3 1982

CERTIFIED MAIL
RETURN RECEIPT REQUESTED

Mr. Dennis J. Krumholz
Riker, Danzig, Scherer & Hyland
744 Broad Street
Newark, New Jersey 07102

FILE

Re: Pacific Vegetable Oil (PVO)
Boonton Borough, Morris County

Dear Mr. Krumholz:

We have received your letter dated May 13, 1982 concerning Pacific Vegetable Oil's (PVO) response to the Department's letter dated April 5, 1982. The Department's letter directed PVO to take certain actions at its facility to remedy certain environmental problems.

The Department is pleased at PVO's cooperative efforts with the Department in this clean-up activity. However, your letter of May 13, 1982 did not fully address all of the Department's concerns. On May 18, 1982 Mr. Gregory Cunningham of my staff and Mr. Alponse Iannuzzi of the Department's Division of Waste Management, Bureau of Field Operations (Hazardous Waste), discussed some of the deficiencies in the letter with Mr. Melenkevitz at the facility in Boonton.

At the meeting PVO agreed to take further actions to address the Department's concerns. Based on the agreements reached at the meeting and the results of subsequent inspections at the facility, your letter of May 13, 1982 will be answered sequentially, point by point.

1. SPILLAGES AND CONTAMINATED SOILS

PVO has apparently satisfactorily completed items listed in subparagraphs (a), (b), (c), (d), (e), (f), and (g), in response to an inspection conducted on February 10, 1982.

In addition, PVO's responses to the following specific subparagraphs of paragraph 1 of the April 5, 1982 letter appear satisfactory: (a), (b), (d), and (f). Additional work is required to comply with the remaining subparagraphs (c), (e), and (g). These subparagraphs are addressed below.

B1

ATTACHMENT B

SUBPARAGRAPH (c)

On June 1, 1982, Mr. Melenkevitz indicated that PVO has not completely removed all the contaminated soils within this building.

SUBPARAGRAPH (e)

This subparagraph in the April 5, 1982 letter should be revised to: "Contaminated material in the streams identified as A, B, and C (including the black material in the oil/water separator in streams A anc C)."

Although PVO has reportedly cleaned up the spillages in the small stream which originates near the recovery tank (south of Division Avenue) and empties into stream A (this small stream shall be referred to as "tributary to stream A",) an inspection conducted by a representative of the Department on May 10, 1982 showed that the stream still contains pollutant materials. On May 18, 1982 Mr. Melenkevitz stated that PVO would take steps to obstruct this stream and thus eliminate the discharge of the oily material. However, the Department is concerned that such an action may result in ground water pollution.

You are directed to inform this Department within ten (10) business days of receipt of this letter, of PVO's proposal to clean-up the area and to eliminate this oily discharge. (Please find attached to this letter the results of water samples collected from tributary to stream A (11969) on February 25, 1982. Additional samples of this stream were collected on June 1, 1982. PVO will receive a copy of the June 1, 1982 results as soon as they become available to the Department.)

SUBPARAGRAPH (g)

In the May 4, 1982 letter, PVO requested additional time to complete this item. In order to give PVO sufficient time to comply with paragraph 1 of the April 5, 1982 letter and remove all spillages and contaminated soils from the Boonton facility, the May 1, 1982 deadline is hereby extended to August 1, 1982. Please be advised that after the contaminated materials are removed, PVO shall not cover the clean ground with crushed stone or any other materials until PVO receives certification from a Departmental representative.

In addition, on May 18, 1982, Mr. Melenkevitz stated that PVO is demolishing buildings only to ground surface. The possibility exists that pollutants may be left in the ground. Please inform this office of the steps PVO intends to take to remove these pollutants or to insure the Department that buried wastes are not degrading the ground water.

2. PITS

I. PITS NORTH OF DIVISION STREET

SUBPARAGRAPH (a)

B2

PVO has satisfactorily complied with the directive to remove the contaminated waste in the nickel catalyst pits. The Department's letter of April 5, 1982, also directed PVO to dismantle the pits so the Department can determine if the waste stored within these pits have contaminated the soils and/or ground water. Mr. Melenkevitz was verbally informed that the Department needs only to collect soil samples, and that complete dismantling of the pits may be unnecessary. Please submit to this Department by July 26, 1982, what actions PVO will take so that the Department can collect a soil sample under the three catalyst pits.

PITS INSIDE ESTER BUILDING

SUBPARAGRAPH (b)

Your letter of May 4, 1982, stated that PVO is attempting to determine the source of water in these two drains/pits inside the Ester Building. You are directed to provide this Office with a report of PVO's findings. In addition, your letter did not give the date when PVO intends to remove the water in these drains. Finally, on May 10, 1982, and June 1, 1982, a representative of this Department collected samples from a third drain/pit, approximately 10 feet deep, also located inside the Ester Building. The results of the May 10, 1982 samples are attached to this letter (11541). You will receive copies of the June 1, 1982 results as soon as the Department receives them.

PIT NEAR LUBE OIL BUILDING

On May 10, 1982, a representative of this Department also collected several samples of water impounded within a concrete pit near the Lube Oil Blend Building. The Departmental representative observed that this water was heavily contaminated with oil and grease. The results of these samples are attached (11542).

Because of the extensive amount of work required in the April 5, 1982 letter, PVO has not yet complied fully with paragraph 2 of the April letter. Therefore, the Department hereby extends the deadline for the removal of pollutant materials from <u>all</u> pits located north of Division Avenue to August 1, 1982.

II. <u>PITS LOCATED SOUTH OF DIVISION STREET</u>

As promised in the April 5, 1982 letter, please find attached to this letter the results of samples collected from two pits in the south west portion of the facility (11970 and 11971). According to Mr. Melenkevitz, sample number 11970 was collected from a sump from which wastewater was pumped into train cars. This sump is located in a small building near the south east portion of the plant. Mr. Melenkevitz also stated that sample number 11971 was collected from a pit in which PVO once stored coal. PVO is directed to remove all the contaminated liquids and sediments from all pits south of Division Street to an offsite location approved by the Division of Waste Management by August 15, 1982.

B3

OTHER IMPOUNDMENTS

In addition to these pits, in at least two areas of the plant site, contaminated liquids are stored within bermed enclosures. On May 18, 1982, representatives of this Division observed a shallow concrete bermed area covered by a metal screen. This bermed area contained a large amount of waste oil. The analysis of the water impounded within another bermed area surrounding a sulfuric acid tank, located near the nickel catalyst tank, was previously submitted to PVO. The results indicated that this water was polluted with nickel and aluminum. PVO is hereby directed to remove these contaminated liquids, as well as any other contaminated liquids or materials impounded within a bermed enclosure at the facility, to an offsite location approved by the Division of Waste Management by August 1, 1982.

3. TANKS

The status of PVO's compliance with paragraph 3 of the April 5, 1982 letter is detailed below.

SUBPARAGRAPH (a)

Since PVO has not met the June 1, 1982 deadline for submitting the report on the tanks north of Division Street, PVO is directed to submit the required report within 2 weeks of receipt of this letter.

SUBPARAGRAPH (b)

PVO's proposed method of removing waste material from the tanks within buildings slated for demolition is satisfactory to this Department.

SUBPARAGRAPH (c)

At the May 18, 1982 meeting, Mr. Melenkevitz agreed to submit a schedule for the inspection of the tanks south of Division Avenue to this Department. PVO is directed to submit a schedule for such an inspection within 2 weeks of receipt of this letter. (Results of the sample of waste water contained in a wooden tank are attached to this letter (11540). Mr. Melenkevitz is aware of the location of this tank.)

4. DRUMS

PVO has apparently satisfactorily complied with subparagraphs (a), (b), (e), and (f) of paragraph #4, of the April 5, 1982 letter. The deficiencies of this paragraph are listed below.

B4

SUBPARAGRAPH (c)

Mr. Melenkevitz stated that about 80 drums in the southeastern part of the facility have not been consolidated near building 72; this must be accomplished by August 1, 1982.

SUBPARAGRAPH (d)

The Department grants PVO's request to extend the deadline to remove all drummed waste to an offsite location approved by the Department's Division of Waste Management to September 1, 1982.

5. WATER SAMPLING

The Department is awaiting the results of PVO's stream sampling of April 20, 1982 as well as the results of subsequent sampling as required in the Department's April 5, 1982 letter. These results must be received by this office within thirty calendar days of the date of collection.

6. TRANSFORMERS

The Department requires clarification on paragraph 6 in PVO's May 4, 1982 letter. In particular, PVO is directed to provide the Department with the following information by August 1, 1982.

(a) The location and serial number of all transformers located onsite at the time of PVO's closure.
(b) The number of transformers onsite at the time of PVO's closure.
(c) The list of transformers currently on site.
(d) Which transformers currently contain or did contain PCB's.
(e) Which transformers have been drained of PCB's.
(f) Copies of the hazardous waste manifests for the disposal of the PCB's.

On May 18, 1982, representatives of the Department noted that a transformer, containing an oily liquid, was placed near PVO's front gate. Please contact Mr. Steve Carfora of the Division of Waste Management, Bureau of Field Operations (Hazardous Waste), at (609) 984-7874 concerning the proper removal to an approved off-site location of this oily material.

At the Boonton facility, PVO must maintain an inventory of all waste materials currently on site and of all disposed wastes. This inventory must be constantly updated and available for review and copy by a representative of this Department at any reasonable time. In addition, PVO must continue to send copies of all manifests of waste shipments from PVO to this office. Finally, PVO shall give this office at least five (5) days notice of any operation to remove wastes to an offsite location so that a representative of the Department may be present.

BS

The Department appreciates PVO's cooperative attitude in these matters thus far. The Department is aware of the large expense and effort incurred by PVO in the clean-up of the site and we have adjusted compliance schedules accordingly. However, the Department will take further enforcement action if PVO does not remove all of the wastes stored at the facility in a complete and timely fashion. Please contact me or Mr. Gregory Cunningham of my staff, at (609) 292-0577 if you have any questions.

Very truly yours,

ORIGINAL SIGNED BY

Joseph A. Miller, Assistant Chief
Region IV
Enforcement & Regulatory Services

A20:ral

cc: Joseph M. Mikulka, Chief, Region IV
Gregory Cunningham, Enforcement Unit, Region IV
Timothy Stone, Bureau of Ground Water Management
Edward Stevenson, Cancer and Toxic Substances Research
Robert Mueller, Cancer and Toxic Substances Research
Steve Carfora, Bureau of Field Operations (Hazardous Waste), Division of Waste Management
Alponse Iannuzzi, Bureau of Field Operations (Hazardous Waste), Division of Waste Management
Edward Putman, Bureau of Abandoned Sites, Division of Waste Management
Keith Onsdorff, Chairman, Executive Enforcement Committee
Steve Austin, Boonton Board of Health
Henry Melenkevitz, PVO, Boonton

B6

Form VST-010
8/79

PLEASE TYPE OR PRINT
WITH BALLPOINT PEN

STATE OF NEW JERSEY
Department of Environmental Protection
Division of Water Resources
WATER ANALYSIS

12

CHAIN OF CUSTODY

BACT. LAB NO. ____
DATE REC'D. ____
BOTTLE NO. 11541
DATE REC'D. ____
STORET ENT. ____
READ ____

MUNICIPALITY BOONTON	COUNTY MORRIS	STREAM	
FACILITY PVO	LOCATION DIVISION AVE.		
REPRESENTATIVE EE	TITLE	COLL NAME GREGORY 204	
REMARKS AT (INSIDE ESTER BUILDING) #3		CUNNINGHAM	

STATION IDENTIFICATION NUMBER: SC, ____ . YR. MO. DAY: 820510 HOUR: 1440.

FIELD ANALYSIS

☐ Water Temp °C	P10,	
☐ D.O.-Winkler	P300,	
☐ D.O.-Probe	P299,	
☐ pH (Field)	P400,	
☐ Sample Depth-ft.	P3,	
☐ Gage Height-ft.	P65,	
☐ Spec. Cond. @ 25 °C	P95,	
☐ Salinity °/00	P480,	
☐ Tide Stage	P70211,	

BACTERIOLOGICAL - DILUTIONS (REQUESTED)

	10	1	-1 10	-2 10	-3 10	-4 10	-5 10	-6 10
Fecal Coliform / Total Coliform								
Fecal Streptococci								

Fecal coli /100 ml ☐ MPN P31615, ☐ MF P31613,

☐ Fecal Strept MPN/100 ml P31677,

☐ Tot coli MPN/100 ml P31505,

BIOCHEMICAL OXYGEN DEMAND

INITIAL D.O. (lab.) ____ SAMPLE
SEED YES ☐ NO ☐

CONC:% ____
BOD ____

☐ BOD ☐ 5-DAY P310, ☐ 6-DAY P312,

ANALYSIS	UNITS	PARAMETER	VALUE	RMKS.
☒ V.O. SCAN	ppb	P		
☐		P		
☐ TETRACHLOROETHYLENE		P	1	
☐ TOLUENE		P	6400	
☐ ETHYL BENZENE		P	620	
☐ α,α,α trifluorotoluene		P	80	
☐ p-xylene		P	200	
☐ O-xylene		P	300	
☐ M-xylene		P	1200	
☐ STYRENE		P	700	
☐ p-bromofluorobenzene		P	420	
☐ N-propylbenzene		P	1700	
☐ p-chlorotoluene		P	330	
☐ 1,3,5-trimethylbenzene		P	340	
☐ p-cymene		P	480	
☐ 1,2,4-trimethylbenzene		P	500	
☐ p-dichlorobenzene		P	400	
☐ M-dichlorobenzene		P	310	
☐ O-dichlorobenzene		P	1200	
☐ N-butylbenzene		P	2100	
☐ 2,3 benzofuran		P	440	
☐ 1,2,4-trichlorobenzene		P	1100	
☐ NAPHTHALENE		P	680	
☐		P		
☐ +7 unidentified peaks		P		

DATE	TIME	CHAIN OF CUSTODY FROM (NAME)	TO (NAME)
			REPORT SUBMITTED JUN 28 1982
			NJDOH Environmental Chemistry Laboratory

Chemist Review ____

Part 1 - Water Quality Inventory Copy
Part 2 - Chemistry Copy
Part 3 - Water Resources Copy (For Transmission)
Part 4 - Bacteriology Copy

B7

Form VST-001
7/81

STATE OF NEW JERSEY
Department of Environmental Protection
Water Analysis

CHAIN OF CUSTODY

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

MUNICIPALITY BOONTON	COUNTY MORRIS	STREAM	
FACILITY PVO	LOCATION DIVISION AVE		
REPRESENTATIVE EE	TITLE	COLL NAME GREGORY 204	
REMARKS PIT #3 (INSIDE ESTER Bldg.)		CUNNINGHAM	

BACT. LAB NO. _____
DATE REC'D. _____
BOTTLE NO. 11541
DATE REC'D _____
STORET ENT. _____ READ _____

Station Identification Number: SC, _____ | YR. MO. DAY: 820510 | HOUR: 1440. | (1) Sample No.: PB, _____

FIELD ANALYSIS

- ☐ Water Temp. °C. (2) P00010,
- ☐ D.O. - Winkler (3) P00300,
- ☐ D.O. - Probe (4) P00299,
- ☐ pH (Field). (5) P00400,
- ☐ Sample Depth-ft. (6) P00003,
- ☐ Stream Flow-CFS (7) P00061,
- ☐ Gage Height-ft. (8) P00065,
- ☐ Spec. Cond. @ 25°C (9) P00095,
- ☐ Salinity °/00 (10) P00480,
- ☐ Tide Stage (11) P70211,

CONDITION CODES

- ☐ Weather Conditions (12) P00041,
- ☐ Flow Severity (13) P01351,
- ☐ _____ Severity (14) P013_ _,
- ☐ _____ Severity (15) P013_ _,

NUTRIENTS

LEVEL ☐ HIGH ☐ LOW

- ☐ NO_2 - N (16) P00615,
- ☐ $NO_2 + NO_3$ - N (17) P00630,
- ☐ NH_3 - N (18) P00610,
- ☐ Tot. Kjeldahl N (19) P00625,
- Ortho - PO_4 as P ☐ (20) P70507, ☐ (21) P00660,
- Phosphorus - tot as P PO_4 ☐ (22) P00665, ☐ (23) P00650,

BACTERIOLOGICAL – DILUTIONS (REQUESTED)

	10	1	-1 10	-2 10	-3 10	-4 10	-5 10	-6 10
Fecal Coliform / Total Coliform								
Fecal Streptococci								

- Fecal coli #100 ml ☐ MPN (24) P31615, ☐ MF (25) P31613,
- ☐ Fecal Strept MPN/100ml (26) P31677,
- ☐ Tot coli MPN/100 ml (27) P31505,

BIOCHEMICAL OXYGEN DEMAND

INITIAL D.O. (lab.) _____ SAMPLE _____

SEED YES ☐ NO ☐

CONC. % _____ BOD _____

- ☐ BOD 5-DAY (28) P310, 6-DAY (29) P312,

- ☒ COD (30) P340, 4575
- ☐ TOC (31) P00680,

- ☐ Color Pt - Cou (32) P00080,
- ☐ Turbidity (33) P00076,
- ☐ Suspended Solids (34) P00530,
- ☐ Suspended Solids Ash (35) P00540,
- ☐ Tot. Solids (36) P00500,
- ☐ Tot. Solids - Ash (37) P00510,
- ☒ Tot. Dissolved Solids (TDS) (38) P70300, 6652

- ☐ pH (LAB) (39) P00403,
- ☐ Alkalinity as $CaCO_3$ (40) P00410,
- ☐ Min. Acidity as $CaCO_3$ (41) P00436,
- ☒ Chloride (42) P00940, 210
- ☐ MBAS (43) P38260,
- ☐ Phenols (44) P32730,
- ☐ Hardness - tot as $CaCO_3$ (45) P00900,
- ☐ Sulfate (46) P00945,
- ☐ Oil & Grease (47) P00556,
- ☐ Petroleum Hydrocarbons (48) P45501,
- ☐ Cyanide (49) P00720,

- ☒ As - tot ug/l (50) P01002, 7
- ☐ Cd - tot ug/l (51) P01027,
- ☒ Cr - tot ug/l (52) P01034, 37
- ☒ Cu - tot ug/l (53) P01042, 680
- ☐ Fe - tot ug/l (54) P01045,
- ☐ Hg - tot ug/l (55) P71900,
- ☐ Mn - tot ug/l (56) P01055,
- ☒ Ni - tot ug/l (57) P01067, 150
- ☒ Pb - tot ug/l (58) P01051, 1 1 1
- ☐ Zn - tot ug/l (59) P01092,

ADDITIONAL ANALYSIS

- ☐ _____ P_____,
- ☐ _____ P_____,
- ☐ _____ P_____,
- ☐ _____ P_____,
- ☐ _____ P_____,

RESULTS mg/l unless otherwise noted

REPORT SUBMITTED

Chemist Review _____ JUN 28 1982

Part 1 (White) - Water Quality Inventory Copy
Part 2 (Canary) - Laboratory Copy
Part 3 (Pink) - Laboratory Copy
Part 4 (Goldenrod) - Field Samplers Copy

NJDEP Environmental Chemistry Laboratory

B8

Form VST-001
7/81

STATE OF NEW JERSEY
Department of Environmental Protection
Water Analysis

12

CHAIN OF CUSTODY

BACT. LAB NO. _____
DATE REC'D. _____
BOTTLE NO. 11540
DATE REC'D _____
STORET ENT. _____ READ _____

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

MUNICIPALITY BOONTON	COUNTY MORRIS	STREAM	
FACILITY PYO	LOCATION DIVISION AVE		
REPRESENTATIVE EE	TITLE	COLL NAME GREGORY 204 CUNNINGHAM	
REMARKS WOODEN TANK			

MS&E

Station Identification Number: SC, _____ | YR. MO. DAY: 820510 | HOUR: 1400 | (1) Sample No.: P8, _____

FIELD ANALYSIS

- ☐ Water Temp. °C. (2) P00010,
- ☐ D.O. - Winkler (3) P00300,
- ☐ D.O. - Probe (4) P00299,
- ☐ pH (Field). (5) P00400,
- ☐ Sample Depth-ft. (6) P00003,
- ☐ Stream Flow-CFS (7) P00061,
- ☐ Gage Height-ft. (8) P00065,
- ☐ Spec. Cond. @ 25 °C (9) P00095,
- ☐ Salinity °/00 (10) P00480,
- ☐ Tide Stage (11) P70211,

BACTERIOLOGICAL – DILUTIONS (REQUESTED)

	10	1	-1 10	-2 10	-3 10	-4 10	-5 10	-6 10
Fecal Coliform / Total Coliform								
Fecal Streptococci								

- Fecal coli #100 ml ☐ MPN (24) P31615, ☐ MF (25) P31613,
- ☐ Fecal Strept MPN/100ml (26) P31677,
- ☐ Tot coli MPN/100 ml (27) P31505,

BIOCHEMICAL OXYGEN DEMAND

INITIAL D.O. (lab.) _____ SAMPLE _____

SEED YES ☐ NO ☐

CONC. % _____ BOD _____

☐ BOD 5-DAY (28) P310, 6-DAY (29) P312,

- ☒ COD (30) P340, 101
- ☐ TOC (31) P00680,

- ☐ Color Pt - Cou (32) P00080,
- ☐ Turbidity (33) P00076,
- ☐ Suspended Solids (34) P00530,
- ☐ Suspended Solids Ash (35) P00540,
- ☐ Tot. Solids (36) P00500,
- ☐ Tot. Solids - Ash (37) P00510,
- ☒ Tot. Dissolved Solids (TDS) (38) P70300, 82

- ☐ pH (LAB) (39) P00403,
- ☐ Alkalinity as $CaCO_3$ (40) P00410,
- ☐ Min. Acidity as $CaCO_3$ (41) P00436,
- ☒ Chloride (42) P00940, 12
- ☐ MBAS (43) P38260,
- ☐ Phenols (44) P32730,
- ☐ Hardness - tot as $CaCO_3$ (45) P00900,
- ☐ Sulfate (46) P00945,
- ☐ Oil & Grease (47) P00556,
- ☐ Petroleum Hydrocarbons (48) P45501,
- ☐ Cyanide (49) P00720,

CONDITION CODES

- ☐ Weather Conditions (12) P00041,
- ☐ Flow Severity (13) P01351,
- ☐ _____ Severity (14) P013_ _,
- ☐ _____ Severity (15) P013_ _,

NUTRIENTS

LEVEL ☐ HIGH ☐ LOW

- ☐ NO_2 - N (16) P00615,
- ☐ $NO_2 + NO_3$ - N (17) P00630,
- ☐ NH_3 - N (18) P00610,
- ☐ Tot. Kjeldahl N (19) P00625,

Ortho - PO_4 as P ☐ (20) P70507, ☐ PO_4 (21) P00660,

Phosphorus - tot as P ☐ (22) P00665, PO_4 ☐ (23) P00650,

- ☒ As - tot ug/l (50) P01002, 5 K
- ☐ Cd - tot ug/l (51) P01027,
- ☒ Cr - tot ug/l (52) P01034, 5 K
- ☒ Cu - tot ug/l (53) P01042, 5 K
- ☐ Fe - tot ug/l (54) P01045,
- ☐ Hg - tot ug/l (55) P71900,
- ☐ Mn - tot ug/l (56) P01055,
- ☒ Ni - tot ug/l (57) P01067, 14
- ☒ Pb - tot ug/l (58) P01051, 9
- ☐ Zn - tot ug/l (59) P01092,

ADDITIONAL ANALYSIS

- ☐ _____ P_____,
- ☐ _____ P_____,
- ☐ _____ P_____,
- ☐ _____ P_____,
- ☐ _____ P_____,

REPORT SUBMITTED

RESULTS mg/l unless otherwise noted

Chemist Review JUN 28 1982

Part 1 (White) - Water Quality Inventory Copy
Part 2 (Canary) - Laboratory Copy
Part 3 (Pink) - Laboratory Copy
Part 4 (Goldenrod) - Field Samplers Copy

NJDEP Environmental Chemistry Laboratory

B9

Form VST-001
7/81

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

STATE OF NEW JERSEY
Department of Environmental Protection
Water Analysis

RECEIVED APR 27 2 55 PM '82

COC

EXCT. LAB NO.	
DATE REC'D.	
BOTTLE NO.	11971
DATE REC'D.	
STORET	ENT. / READ

MUNICIPALITY: BOONTON	COUNTY: MORRIS	STREAM
FACILITY: PVO	LOCATION: DIVISION AVENUE	
REPRESENTATIVE: EF	TITLE:	COLL NAME: GREGORY 204
REMARKS: SAMPLE COLLECTED FROM CONCRETE PIT		CUNNINGHAM

Station Identification Number: S C ,

YR. MO. DAY: 610225 — HOUR: 1530

Sample No.: (1) P 8 ,

FIELD ANALYSIS

Parameter	Code	Result
☐ Water Temp. °C.	(2) P00010	
☐ D.O. - Winkler	(3) P00300	
☐ D.O. - Probe	(4) P00299	
☐ pH (Field).	(5) P00400	
☐ Sample Depth-ft.	(6) P00003	
☐ Stream Flow-CFS	(7) P00061	
☐ Gage Height-ft.	(8) P00065	
☐ Spec. Cond. @ 25°C	(9) P00095	
☐ Salinity ⁰/oo	(10) P00480	
☐ Tide Stage	(11) P70211	

CONDITION CODES

Parameter	Code	Result
☐ Weather Conditions	(12) P00041	
☐ Flow Severity	(13) P01351	
☐ ______ Severity	(14) P013__	
☐ ______ Severity	(15) P013__	

NUTRIENTS

LEVEL ☐ HIGH ☐ LOW

Parameter	Code	Result
☐ NO_2 - N	(16) P00615	
☐ $NO_2 + NO_3$ - N	(17) P00630	
☐ NH_3 - N	(18) P00610	
☐ Tot. Kjeldahl N	(19) P00625	
Ortho-PO_4 as P ☐	(20) P70507	
Ortho-PO_4 as PO_4 ☐	(21) P00660	
Phosphorus-tot as P ☐	(22) P00665	
Phosphorus-tot as PO_4 ☐	(23) P00650	

BACTERIOLOGICAL – DILUTIONS (REQUESTED)

Fecal Coliform / Total Coliform: 10, 1, 10^{-1}, 10^{-2}, 10^{-3}, 10^{-4}, 10^{-5}, 10^{-6}

Fecal Streptococci: 10, 1, 10^{-1}, 10^{-2}, 10^{-3}, 10^{-4}, 10^{-5}, 10^{-6}

Parameter	Code	Result
Fecal coli #100 ml ☐ MPN	(24) P31615	
Fecal coli #100 ml ☐ MF	(25) P31613	
☐ Fecal Strept MPN/100ml	(26) P31677	
☐ Tot coli MPN/100 ml	(27) P31505	

BIOCHEMICAL OXYGEN DEMAND

INITIAL D.O. (lab.) ______ SAMPLE

SEED YES ☐ NO ☐

CONC. %

BOD __

Parameter	Code	Result
☐ BOD	5-DAY (28) P310 / 6-DAY (29) P312	
☐ COD	(30) P340	
☒ TOC	(31) P00680	37.5
☐ Color Pt - Cou	(32) P00080	
☐ Turbidity	(33) P00076	
☐ Suspended Solids	(34) P00530	
☐ Suspended Solids Ash	(35) P00540	
☐ Tot. Solids	(36) P00500	
☐ Tot. Solids - Ash	(37) P00510	
☐ Tot. Dissolved Solids (TDS)	(38) P70300	

Parameter	Code	Result
☐ pH (LAB)	(39) P00403	
☐ Alkalinity as $CaCO_3$	(40) P00410	
☐ Min. Acidity as $CaCO_3$	(41) P00436	
☐ Chloride	(42) P00940	
☐ MBAS	(43) P38260	
☐ Phenols	(44) P32730	
☐ Hardness - tot as $CaCO_3$	(45) P00900	
☐ Sulfate	(46) P00945	
☒ Oil & Grease	(47) P00556	55
☐ Petroleum Hydrocarbons	(48) P45501	
☐ Cyanide	(49) P00720	
☒ As - tot ug/l	(50) P01002	11
☒ Cd - tot ug/l	(51) P01027	24
☒ Cr - tot ug/l	(52) P01034	5K
☒ Cu - tot ug/l	(53) P01042	15
☐ Fe - tot ug/l	(54) P01045	
☐ Hg - tot ug/l	(55) P71900	
☐ Mn - tot ug/l	(56) P01055	
☒ Ni - tot ug/l	(57) P01067	160
☒ Pb - tot ug/l	(58) P01051	830
☐ Zn - tot ug/l	(59) P01092	

ADDITIONAL ANALYSIS ppb

Parameter	Code	Result
☒ Aluminum ppb	P	143
☐ ______	P	
☐ ______	P	
☐ ______	P	

REPORT SUBMITTED

APR 14 1982

RESULTS mg/l unless otherwise noted

Chemist Review: NJDOH Environmental Chemistry Laboratory

Part 1 (White) - Water Quality Inventory Copy
Part 2 (Canary) - Laboratory Copy
Part 3 (Pink) - Laboratory Copy
Part 4 (Goldenrod) - Field Samplers Copy

B10

Form VST-001
7/81

PLEASE TYPE OR PRINT
WITH BALLPOINT PEN

STATE OF NEW JERSEY
Department of Environmental Protection
Water Analysis

12

CHAIN OF CUSTODY

BACT. LAB NO. _____
DATE REC'D. _____
BOTTLE NO. 11542
DATE REC'D _____
STORET ENT. _____ READ _____

MUNICIPALITY BOONTON	COUNTY MORRIS	STREAM	
FACILITY PVO	LOCATION DIVISION AVE		
REPRESENTATIVE EE	TITLE	COLL NAME GREGORY 204	
REMARKS LIQUID IMPOUNDED IN CUNNINGHAM PIT NORTH OF MECHANIC STREET - OILY MATERIAL FLOATING ON LIQUID SURFACE			

Station Identification Number: SC, _____ | YR. MO. DAY: 820510 | HOUR: 1750. | (1) Sample No.: P8, _____

FIELD ANALYSIS

- ☐ Water Temp. °C. (2) P00010,
- ☐ D.O. - Winkler (3) P00300,
- ☐ D.O. - Probe (4) P00299,
- ☐ pH (Field). (5) P00400,
- ☐ Sample Depth-ft. (6) P00003,
- ☐ Stream Flow-CFS (7) P00061,
- ☐ Gage Height-ft. (8) P00065,
- ☐ Spec. Cond. @ 25°C (9) P00095,
- ☐ Salinity °/00 (10) P00480,
- ☐ Tide Stage (11) P70211,

CONDITION CODES

- ☐ Weather Conditions (12) P00041,
- ☐ Flow Severity (13) P01351,
- ☐ _____ Severity (14) P013_ _,
- ☐ _____ Severity (15) P013_ _,

NUTRIENTS

LEVEL ☐ HIGH ☐ LOW

- ☐ NO_2 - N (16) P00615,
- ☐ $NO_2 + NO_3$ - N (17) P00630,
- ☐ NH_3 - N (18) P00610,
- ☐ Tot. Kjeldahl N (19) P00625,
- Ortho - PO_4 as P ☐ (20) P70507, ☐ (21) P00660,
- Phosphorus - tot as P PO_4 ☐ (22) P00665, ☐ (23) P00650,

BACTERIOLOGICAL – DILUTIONS (REQUESTED)

	10	1	-1 10	-2 10	-3 10	-4 10	-5 10	-6 10
Fecal Coliform / Total Coliform								
Fecal Streptococci								

- Fecal coli #100 ml ☐ MPN (24) P31615, ☐ MF (25) P31613,
- ☐ Fecal Strept MPN/100ml (26) P31677,
- ☐ Tot coli MPN/100 ml (27) P31505,

BIOCHEMICAL OXYGEN DEMAND

INITIAL D.O. (lab.) _____ _____ SAMPLE

SEED YES ☐ NO ☐

CONC. % _____

BOD _____

☐ BOD _____ 5-DAY (28) P310, 6-DAY (29) P312,

- ☒ COD (30) P340, 2631
- ☐ TOC (31) P00680,

- ☐ Color Pt - Cou (32) P00080,
- ☐ Turbidity (33) P00076,
- ☐ Suspended Solids (34) P00530,
- ☐ Suspended Solids Ash (35) P00540,
- ☐ Tot. Solids (36) P00500,
- ☐ Tot. Solids - Ash (37) P00510,
- ☒ Tot. Dissolved Solids (TDS) (38) P70300, ~~3118448~~ AD

- ☐ pH (LAB) (39) P00403,
- ☐ Alkalinity as $CaCO_3$ (40) P00410,
- ☐ Min. Acidity as $CaCO_3$ (41) P00436,
- ☒ Chloride (42) P00940, 6
- ☐ MBAS (43) P38260,
- ☐ Phenols (44) P32730,
- ☐ Hardness - tot as $CaCO_3$ (45) P00900,
- ☐ Sulfate (46) P00945,
- ☐ Oil & Grease (47) P00556,
- ☐ Petroleum Hydrocarbons (48) P45501,
- ☐ Cyanide (49) P00720,

- ☒ As - tot ug/l (50) P01002, 5K
- ☐ Cd - tot ug/l (51) P01027,
- ☒ Cr - tot ug/l (52) P01034, 17
- ☒ Cu - tot ug/l (53) P01042, 28
- ☐ Fe - tot ug/l (54) P01045,
- ☐ Hg - tot ug/l (55) P71900,
- ☐ Mn - tot ug/l (56) P01055,
- ☒ Ni - tot ug/l (57) P01067, 321
- ☒ Pb - tot ug/l (58) P01051, 53
- ☐ Zn - tot ug/l (59) P01092,

ADDITIONAL ANALYSIS

- ☐ _____ P_____,
- ☐ _____ P_____,
- ☐ _____ P_____,
- ☐ _____ P_____,
- ☐ _____ P_____,

RESULTS mg/l unless otherwise noted

REPORT SUBMITTED

Chemist Review _____

JUN 28 1982

NJDOH Environmental Chemistry Laboratory

B11

Part 1 (White) - Water Quality Inventory Copy
Part 2 (Canary) - Laboratory Copy
Part 3 (Pink) - Laboratory Copy
Part 4 (Goldenrod) - Field Samplers Copy

-un -b

Form VST-001
7/81

PLEASE TYPE OR PRINT
WITH BALLPOINT PEN

STATE OF NEW JERSEY
Department of Environmental Protection
Water Analysis

COC

BACT. LAB NO.	
DATE REC'D.	
BOTTLE NO.	11970
DATE REC'D	
STORET	ENT. / READ.

MUNICIPALITY: BOONTON	COUNTY: MORRIS	STREAM	
FACILITY: PVO	LOCATION: DIVISION AVENUE		
REPRESENTATIVE: EE	TITLE	COLL. NAME: GREGORY CUNNINGHAM	
REMARKS: SAMPLE COLLECTED FROM SUMP			

Station Identification Number	YR. MO. DAY	HOUR		Sample No.
S C ,	820225	1515	(1)	P 8 ,

FIELD ANALYSIS

Parameter	Code	Value
☐ Water Temp. °C.	(2) P00010	
☐ D.O. - Winkler	(3) P00300	
☐ D.O. - Probe	(4) P00299	
☐ pH (Field)	(5) P00400	
☐ Sample Depth-ft.	(6) P00003	
☐ Stream Flow-CFS	(7) P00061	
☐ Gage Height-ft.	(8) P00065	
☐ Spec. Cond. @ 25°C	(9) P00095	
☐ Salinity °/00	(10) P00480	
☐ Tide Stage	(11) P70211	

CONDITION CODES

Parameter	Code	Value
☐ Weather Conditions	(12) P00041	
☐ Flow Severity	(13) P01351	
☐ ______ Severity	(14) P013__	
☐ ______ Severity	(15) P013__	

NUTRIENTS

LEVEL ☐ HIGH ☐ LOW

Parameter	Code	Value
☐ NO_2 - N	(16) P00615	
☐ $NO_2 + NO_3$ - N	(17) P00630	
☐ NH_3 - N	(18) P00610	
☐ Tot. Kjeldahl N	(19) P00625	
Ortho - PO_4 as P	☐ (20) P70507	
Ortho - PO_4 as PO_4	☐ (21) P00660	
Phosphorus - tot as P	☐ (22) P00665	
Phosphorus - tot as PO_4	☐ (23) P00650	

BACTERIOLOGICAL – DILUTIONS (REQUESTED)

	10	1	-1 10	-2 10	-3 10	-4 10	-5 10	-6 10
Fecal Coliform / Total Coliform								
Fecal Streptococci								

Parameter	Code	Value
Fecal coli #100 ml ☐ MPN	(24) P31615	
☐ MF	(25) P31613	
☐ Fecal Strept MPN/100ml	(26) P31677	
☐ Tot coli MPN/100 ml	(27) P31505	

BIOCHEMICAL OXYGEN DEMAND

INITIAL D.O. (lab.) ________ SAMPLE

SEED YES ☐ NO ☐

CONC. %

BOD __

Parameter	Code	Value
☐ BOD	5-DAY (28) P310, 6-DAY (29) P312	
☒ COD	(30) P340	849
☒ TOC	(31) P00680	165.7
☐ Color Pt - Cou	(32) P00080	
☐ Turbidity	(33) P00076	
☐ Suspended Solids	(34) P00530	
☐ Suspended Solids Ash	(35) P00540	
☐ Tot. Solids	(36) P00500	
☐ Tot. Solids - Ash	(37) P00510	
☒ Tot. Dissolved Solids (TDS)	(38) P70300	1876

Parameter	Code	Value
☐ pH (LAB)	(39) P00403	
☐ Alkalinity as $CaCO_3$	(40) P00410	
☐ Min. Acidity as $CaCO_3$	(41) P00436	
☒ Chloride	(42) P00940	75
☒ MBAS	(43) P38260	1.0
☐ Phenols	(44) P32730	
☐ Hardness - tot as $CaCO_3$	(45) P00900	
☒ Sulfate	(46) P00945	2850
☒ Oil & Grease	(47) P00556	189.4J
☐ Petroleum Hydrocarbons	(48) P45501	
☐ Cyanide	(49) P00720	
☒ As - tot ug/l	(50) P01002	10
☒ Cd - tot ug/l	(51) P01027	1K
☒ Cr - tot ug/l	(52) P01034	36
☒ Cu - tot ug/l	(53) P01042	430
☐ Fe - tot ug/l	(54) P01045	
☐ Hg - tot ug/l	(55) P71900	
☐ Mn - tot ug/l	(56) P01055	
☒ Ni - tot ug/l	(57) P01067	2545
☒ Pb - tot ug/l	(58) P01051	32
☐ Zn - tot ug/l	(59) P01092	

ADDITIONAL ANALYSIS

ppb

Parameter	Code	Value
☒ Aluminum ppb	P	1868
☐	P	
☐	P	
☐	P	

REPORT SUBMITTED
APR 14 1982

RESULTS mg/l unless otherwise noted

Chemist Review NJDOH Environmental Chemistry Laboratory

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Part 2 (Canary) - Laboratory Copy
Part 3 (Pink) - Laboratory Copy
Part 4 (Goldenrod) - Field Samplers Copy

B12

Form VST-001
7/81

STATE OF NEW JERSEY
Department of Environmental Protection
Water Analysis

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

COC

BACT. LAB NO. _____
DATE REC'D. _____
BOTTLE NO. 11969
DATE REC'D _____
STORET ENT. _____ READ _____

MUNICIPALITY BOONTON	COUNTY MORRIS	STREAM CROOKED BROOK
FACILITY PYO	LOCATION DIVISION AVENUE	COLL NAME GREGORY 204 CUNNINGHAM
REPRESENTATIVE EE	TITLE	
REMARKS RUNOFF WHICH FLOWS INTO "A STREAM"		

Station Identification Number: SC. _____ YR. MO. DAY: 820225 HOUR: 1500 (1) Sample No.: PB. _____

FIELD ANALYSIS

- ☐ Water Temp. °C. (2) P00010,
- ☐ D.O. - Winkler (3) P00300,
- ☐ D.O. - Probe (4) P00299,
- ☐ pH (Field). (5) P00400,
- ☐ Sample Depth-ft. (6) P00003,
- ☐ Stream Flow-CFS (7) P00061,
- ☐ Gage Height-ft. (8) P00065,
- ☐ Spec. Cond. @ 25°C (9) P00095,
- ☐ Salinity °/00 (10) P00480,
- ☐ Tide Stage (11) P70211,

CONDITION CODES

- ☐ Weather Conditions (12) P00041,
- ☐ Flow Severity (13) P01351,
- ☐ _____ Severity (14) P013_ _,
- ☐ _____ Severity (15) P013_ _,

NUTRIENTS

LEVEL ☐ HIGH ☐ LOW

- ☐ NO_2 - N (16) P00615,
- ☐ $NO_2 + NO_3$ - N (17) P00630,
- ☐ NH_3 - N (18) P00610,
- ☐ Tot. Kjeldahl N (19) P00625,
- Ortho - PO_4 as P ☐ (20) P70507, ☐ (21) P00660,
- Phosphorus - tot as P PO_4 ☐ (22) P00665, ☐ (23) P00650,

BACTERIOLOGICAL – DILUTIONS (REQUESTED)

	10	1	-1 10	-2 10	-3 10	-4 10	-5 10	-6 10
Fecal Coliform / Total Coliform								
Fecal Streptococci								

- Fecal coli #100 ml ☐ MPN (24) P31615, ☐ MF (25) P31613,
- ☐ Fecal Strept MPN/100ml (26) P31677,
- ☐ Tot coli MPN/100 ml (27) P31505,

BIOCHEMICAL OXYGEN DEMAND

INITIAL D.O. (lab.) _____ SAMPLE

SEED YES ☐ NO ☐

CONC. % _____ BOD _____

- ☐ BOD 5-DAY (28) P310, 6-DAY (29) P312,
- ☒ COD (30) P340, 1598
- ☒ TOC (31) P00680, 178.2
- ☐ Color Pt - Co (32) P00080,
- ☐ Turbidity (33) P00076,
- ☐ Suspended Solids (34) P00530,
- ☐ Suspended Solids Ash (35) P00540,
- ☐ Tot. Solids (36) P00500,
- ☐ Tot. Solids - Ash (37) P00510,
- ☒ Tot. Dissolved Solids (TDS) (38) P70300, 762

- ☐ pH (LAB) (39) P00403,
- ☐ Alkalinity as $CaCO_3$ (40) P00410,
- ☐ Min. Acidity as $CaCO_3$ (41) P00436,
- ☒ Chloride (42) P00940, 56
- ☒ MBAS (43) P38260, .6
- ☐ Phenols (44) P32730,
- ☐ Hardness - tot as $CaCO_3$ (45) P00900,
- ☒ Sulfate (46) P00945, 250
- ☒ Oil & Grease (47) P00556, 26.9J
- ☐ Petroleum Hydrocarbons (48) P45501,
- ☐ Cyanide (49) P00720,

- ☒ As - tot ug/l (50) P01002, 145
- ☒ Cd - tot ug/l (51) P01027, 11
- ☒ Cr - tot ug/l (52) P01034, 128
- ☒ Cu - tot ug/l (53) P01042, 1483
- ☐ Fe - tot ug/l (54) P01045,
- ☐ Hg - tot ug/l (55) P71900,
- ☐ Mn - tot ug/l (56) P01055,
- ☒ Ni - tot ug/l (57) P01067, 1256.5
- ☒ Pb - tot ug/l (58) P01051, 1445
- ☐ Zn - tot ug/l (59) P01092,

ADDITIONAL ANALYSIS

- ☒ Aluminum ppb 23670
- ☐ _____ P _____
- ☐ _____ P _____
- ☐ _____ P _____

REPORT SUBMITTED

APR 14 1982

RESULTS mg/l unless otherwise noted

Chemist Review NJDOH Environmental Chemistry Laboratory

Part 1 (White) - Water Quality Inventory Copy
Part 2 (Canary) - Laboratory Copy
Part 3 (Pink) - Laboratory Copy
Part 4 (Goldenrod) - Field Samplers Copy

R13

HAZARDOUS WASTE INVESTIGATION IW/EP 14-35

Inspector: Alphonse Iannuzzi AFJr. Date: 10-12-82

Location: Pacific Vegetable Oil International, Inc. (PVO)

St: 416 Division Street Property owner:

Town: Boonton

County: Morris

Lot: 11 Block: 69, 2

Origin of Complaint: Telephone conversations with Henry Melenkevitz of PVO.

Complaint:

Findings:

The following are listings of information obtained from recent telephone conversations with Henry Melenkevitz, PVO plant manager.

10-6-82 Mr. Melenkevitz called to determine if the DWM has determined if PVO is required to manifest its 150 off grade nickel catalyst drums off site. Mr. Melekevitz stated that the actual quantity of this material is 167 drums. He was told that his request for classification of this material is being processed.

A recent drum count of all drumed material on site by PVO indicated that the total is 814 drums.

10-12-82 Mr. Melenkevitz called to determine if the DWM determined if PVO is required to manifest its 167 drums of off grade nickel catalyst drums off site. Mr. Melenkevitz was told that the DWM is processing his request for classification of this material.

A September 21, 1982 letter recently reviewed by DWM from PVO's attorney Dennis J. Krumholz indicated that PVO had shipped 150 drums of catalyst to Inmetco of Pittsburgh, PA. Mr. Melekevitz stated that this was an erroneous statement and that these drums of off grade nickel catalyst, now totaled at 167, are still on site. He said that a letter correcting this statement will be sent to the DEP.

cc Jeff Kane, DWM
Greg Cunningham, Region IV, DWR

Attachment C

HAZARDOUS WASTE INVESTIGATION IW/EF 14-35

Inspector: Alphonse Iannuzzi, Jr. Date: 9/23/82

Location: Pacific Vegetable Oil International, Inc.

St: 416 Division St. Property owner:

Town: Boonton

County: Morris

Lot: 1 Block: 69, 2

Nature of Complaint:

Complaint: Follow-up of 5/18/82 investigation

Findings:

On 9/23/82, a follow-up investigation of Pacific Vegetable Oil (PVO) was performed at the above address with Greg Cunningham, DWR Region IV, and Dan Toder, DWR Geologist. Henry Melenkevitz, PVO plant manager, was contacted and supplied all pertinent information.

The DWR's main purpose for visiting PVO was to check under the nickel catalyst pits for possible groundwater pollution. Samples were obtained from the pits by DWR during the inspection. The status of PVO's compliance with the 4/5/82 DWR directive letter will not be addressed in this report due to the DWR being the lead agency controlling PVO's clean-up. Only waste disposal and spill clean-up will be addressed.

Waste disposal

The following is a list of all waste material that PVO manifested off site, including manifest #, shipping date and waste description. All manifests were properly completed.

Manifest #	Shipping date	Waste description	TSDF
1. NJ0098595	2/16/82	4 drums of PCB	Chemical Waste Management, Alabama
2. NJ0099228	4/12/82	2 drums of pesticide (Drew clad CF)	AETC, Mt. Olive, NJ
3. NJ0115767	6/30/82	3 drums of flammable liquid (high flash naptha)	All County Environmental Services, Edgewater, NJ
4. NJ0098300	7/12/82	2,100 gallons of colloid water	SCA-Earthline, Newark, NJ
5. NJ0117982	7/30/82	One roll-off of spill clean-up material	CECOS International, Niagara Falls, NY
6. NJ0067610	7/28/82	3,000 gallons of liquid from the nickel catalyst pits	SCA-Earthline, Newark, NJ

C-2

Pacific Vegetable Oil International, Inc. - 9/23/82

	Manifest #	Shipping date	Waste description	TSDF
7.	NJ0117808	8/4/82	One roll-off of spill clean-up material	CECOS International, Niagara, NY
8.	NJ0098613	8/6/82	One roll-off of spill clean-up material	CECOS International, Niagara, NY

Shipments #3 through 8 have been made after the last DWM investigation of 5/18/82.

As stated in subparagraph (c) of PVO's 10/10/82 response to DWR's 7/13/82 directive, PVO has sold drummed materials stored in building #72 and had them removed without a manifest. Shipping documents for some of this material were reviewed during the investigation. PVo has not been maintaining a separate file for these documents, they have been kept with other shipping documents pertaining to PVO's on site active warehousing operations. Mr. Melenkevitz stated that he will maintain a separate folder for shipments of this material.

In a 9/21/82 letter to the DWR. Region IV, PVO stated that they could not have all drummed material removed off site by the 9/1/82 deadline and asked for an extension to remove the drums in a "reasonable amount of time".

Materials in building 72 area

PVO has not been keeping an inventory of drummed material stored on site and hasn't given the DWM an actual drum count of material needing to be disposed in this area. PVO was just keeping a log for material that was shipped from their site.

The following is a list of material that Mr. Melenkevitz stated was stored in the building #72 area. Many of these quantities are estimates made by Mr. Melenkevitz (a drum equals 55 gallons unless specified).

1. 143 drums of off grade nickel catalyst (35 gallons each).
2. 40 drums of top fraction fatty acid vegetable oil derivative.
3. 20 drums of soda ash.
4. 9 drums of GPS 92 base ethoxylated steric acid.
5. 4 drums of white mineral oil (PVO intends to use this in its present off site toll operations for R & D work as a defoamer).
6. 14 drums of zirconium ortho sulfate.
7. 2 drums of flake caustic fused into a solid.
8. 4 drums of glyceral-mono-sterate.
9. 4 drums of ethylene triamine (a caustic that PVO intends to dispose of as a hazardous waste).
10. 20 drums of assorted ethoxylates (intended to be sold to Unisphere Chemical Co., S. Carolina).

11. 10 bags (100 lbs. each) citric acid.

12. 460 drums of spent nickel catalyst (this is a rough estimate).

13. 2 kegs (100 lbs each) of erythorbic acid.

14. 70 bags (unknown quantity) of lime.

15. 175 drums of unknown material.

16. 20 drums of pack lab material (I counted these during the inspection).

17. 4 drums of propane oil (I counted these during the inspection).

Mr. Melenkevitz stated that he identifies unlabeled drums by looking at contents, odor, and performing product quality assurance tests at their on site lab.

Transformers

The transformer removal and PCB testing situation has not been totally resolved. The following is a list of the transformers that were on site, their present location, and if they contain PCB's.

1. Station #1 (2 units at the boiler house), located on site, no PCB.

2. Station #2 (1 unit), located on site, no PCB.

3. Station #3 (1 unit), sold to G & S Motor Equipment, 1800 Harrison Ave., Kearny, NJ, unknown if it contained PCB.

4. Station #4 (3 units), located on site, no PCB.

5. Station #5 (3 units), location unknown (removed by S & S Equipment, Brooklyn, NY), unknown if it contained PCB.

6. Station #6 (3 units), location unknown (removed by S & S Equipment, Brooklyn, NY), unknown if it contained PCB.

7. Pole transformers near lab, located on site, PCB fluid drained and disposed via manifest #NJ0098595 (2/16/82).

8. Open transformer containing oily water not belonging to PVO (1 unit), location unknown, unknown if it contained PCB. The owner of this transformer is Bilimi Corp., 78 Logan Ave., Jersey City, NJ.

PVO still has to determine the locations of transformers Station #5, Station #6, and the Bilimi Corporation transformer.

Facility inspection

An inspection of PVO's facility occurred during the investigation with Mr. Melenkevitz and the DWR personnel. The following are observations noted during the inspection.

North side of Division Street

1. Jack hammering through the floor of the nickel catalyst pits indicated green liquid, similar to the nickel catalyst solution stored in the pits, coming from the ground under pits A and B. The DWR obtained samples of this material during

the inspection. More detailed information pertaining to this event can be obtained from the DWR since they observed the whole operation.

2. An approximately 40' x 40' pile of white solid soda ash was noted in the oil recovery building. Mr. Melenkevitz stated that this material was from storage bins in a section of the plant that was demolished. This material is intended to be drummed and sold to a Rambach Co., Newark, NJ.

3. There are several lab samples of PVO's products and old lab reagents in the Research and Control lab building. This observation was made from outside of the building.

4. An approximately 60' x 5' pile of contaminated soil was noted stored on a cement pad in the compactor area. Most of this material was covered with a plastic tarp. An approximately 50' x 5' spill of brown material resulting from run-off from this pile was noted on soil next to the pad.

5. Oily soil was noted at the base of transformer station #4 near building #72. Since this transformer was analyzed and determined to be PCB free and Mr. Melenkevitz stated that PVO never changed the fluid, this material will be disposed with spill clean-up material.

6. A large amount of haphazardly stacked empty drums were noted outside of building #72. Some containing residues were collecting rainwater. Some of the sealed drums contained residual solids from the colloid water drums.

7. Some full 55 gallon metal drums stored outside of building #72 were rusting and in poor condition.

8. Some oil on ponded water west of building #72 was noted (approx. 25' x 5'). North of this area, on a hill, some brown contaminated soil was noted (approx. 10' x 4' area).

South side of Division Street

9. Black sludge-like material with strong fatty acid odors was oozing out of soil into a drainage pit next to the recovery tank. Mr. Melenkevitz did not know what this material was.

10. A large pile (approx. 20' x 15') of black solid was noted south of the recovery tank. Mr. Melenkevitz stated that this material is coal dust and wants to know if this material has to be removed off site. This material is located next to where the coal hopper used to be.

11. Two open end pipes, next to the Gibbs unit tank, were oozing out a black sludge and liquid with sewage-like odors. Mr. Melenkevitz did not know what this material was or what these pipes were once used for.

12. Several drop tanks in between the railroad tracks on site contain vegetable oil material.

13. Some spillage was noted next to the railroad tracks (approx. 20' x 3').

14. Some spillage was noted on soil in the southeast section of the facility (approx. 10' x 6') where drums were recently stored and removed.

Pacific Vegetable Oil International, Inc. - 9/23/82

15. Non-petroleum oils with fatty acid odors were noted in the separator for the stream in the southeast section of the facility.

Actions to be taken by PVO

The following is information or actions that Mr. Melenkevitz stated that PVO will take to comply with DWM inspectors requests.

1. Immediately start maintaining a log of all material on site that PVO has to dispose (building #72 area) and the amount and type of this material removed off site. This log will be updated at least monthly.

2. Obtain information pertaining to the location of transformers station #5, #6, and the Bilimi Corp. transformer, including transformer serial numbers.

3. Dispose of pile of contaminated soil as a hazardous waste and clean-up spill that resulted from run-off from this pile during the first week in October, 1982.

4. Clean-up oily soil at base of transformer station #4, during the first week in October, 1982.

5. Composite residual solids from colloid water drums to obtain full drums of this material, pump contaminated rainwater into secure drums and stack empty drums so that rainwater will not accumulate in them.

6. Bring all drums in poor condition located outside of building #72 to the inside of this building.

7. Clean up all spills within a reasonable amount of time.

Additional comments

During the investigation, Mr. Melenkevitz gave this inspector three sample analysis for liquid waste samples token by Greg Cunningham, DWR. He asked if this material can be disposed at the Jersey City Sewage Authority. Tank trailers will be used to transport this material. Analysis are attached for DWR sample #11542, 11971, and 11540.

Samples/photos

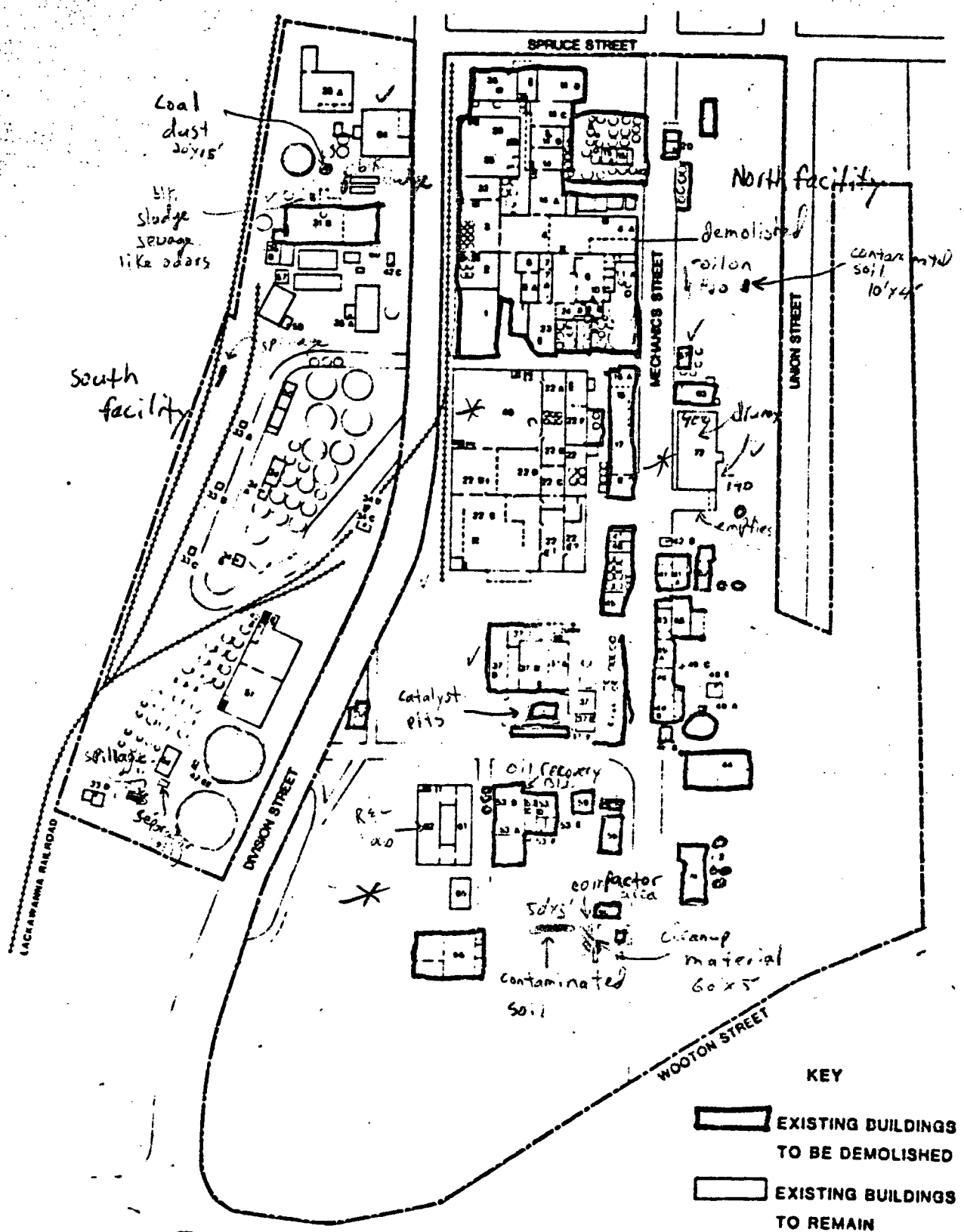
No samples were obtained and five photographs of the facility were taken.

cc: Jeff Kane
Greg Cunningham, Region IV, DWR
G & S Motor Equipment file (HW/EF 10-43)

Reviewed 10/21/82 ss

Pacific Vegetable Oil, Boonton
9-23-82
A. Iannuzzi 14-35

DEMOLITION PLAN



KAY CORPORATION
PVO INTERNATIONAL
BOONTON, NEW JERSEY

C-7

NEBYN ASSOCIATES
FOREST PETERSON ASSOCIATES
REAL ESTATE CONSULTANTS
15 East 40th Street
New York, N.Y. 10016 (212) 684-0086

DIVISION OF WASTE MANAGEMENT
[illegible]EAU OF FIELD OPERATIONS

HW/EF #14-01-06

INVESTIGATIVE REPORT

Inspector: Alphonse Iannuzzi Jr. Date: 8-9-83 Time In: 0840 hrs DWM Incident Report #: ______
Time Out: –

Company Name: Pacific Vegetable Oil International Telephone: (201) 334-2902
EPA ID #: None Property Owner: ______
Street: 416 Division St. Address: ______
Town: Boonton
County: Morris
Lot: 11 Block: 67.2
Type Ownership: ______

Complaint: meeting and site inspection

Origin of Complaint: follow up investigation

Samples taken? ☐ YES ☑ NO

Photos taken? ☐ YES ☑ NO

Findings:

On 8/9/83 a site inspection and meeting was held at PVO at the above address with Bill Nehls, DWM-HA, and Greg Cunningham, DLB. Hank Melenkewitz, PVO was the main contact at PVO. The meeting was held with PVO attorney's, DEP attorney's, and various concerned parties. An attendance sheet will be available in PVO's file.

Site inspection

The following observations were made during the site inspection.

1) PVO is in the process of segregating and storing lab reagents from the research lab to the guard house. A large amount of lab reagents and lab samples (various solvents) were noted in the research lab and in building #65.

ATTACHMENT D

Incident Report #: N/A HW/EF #
Subject: PVO Date: 8-4-93
Page 2 of 3

Findings and Summary:

3) The rusted drums containing a liquid were noted behind building #65. These drums are unlabeled.

3) A leaking drum containing coconut oil was noted in the parking area for building #40. This building is the only active area of PVO. They receive and ship edible and technical grade products for their customers.

4) A tanker labeled #1 is having contaminated water with vegetable oil products pumped into it from drums in the building #72 area. The sludge from these drums will be solidified and disposed off site. Two drums of filter cake material were noted leaking in the area. Some spillage was noted in the area from pumping out drums.

5) A company called Appalo chem is going to move into building #71. Some of Appalo's equipment and trucks were on site.

6) Hartland spillage was noted along the railroad tracks on the south side of the facility.

Meeting

The following information was obtained at the meeting.

1) PVO intends to remove the tanks on the S. side facility.

2) The research lab building is intended to be sold.

3) PVO states that ± 250 drums are on site.

4) PVO stated that they will clean up spillage on the S. side of the facility, dispose of drums, and tanks on the S. side of the facility, categorize and dispose laboratory reagents, and install monitoring

D2

cident Report #: N/A

ubject: PVO

HW/EF #

ate: 8-9-83

indings and Summary:

wells within 30 day to 6 month periods

The DWR will write an order to PVO giving deadlines for all of the above mentioned environmental concerns.

cc

Bill Neihs, DWM, HQ

For: Al Iaquinta

AUG 25 1983

DRAFT

Dennis J. Krumholz, Esquire
Rikee, Danzig, Scherer and Hyland
744 Broad Street
Newark, New Jersey 07102

Re: Pacific Vegetable Oil (PVO)
Boonton Town, Morris County

Dear Mr. ~~Krumholz~~ Krumholz,

This letter will confirm the following topics discussed during the meeting at (Pacific Vegetable Oil's) ~~PVO~~ facility on August 9, 1983 between representatives of PVO and this Department.

Streams

Mr. Henry Melenkevitz of PVO will be informed in the near future of the date the Department will sample C and A streams for nickel, ~~hardness, and a pesticide~~ scan. We agreed at the meeting that PVO will continue to monitor the inlet and outlet of Streams C and the outlet of tributary to Stream A for nickel only on a monthly basis. However, since the toxicity of nickel to aquatic life is dependent upon the hardness of the water, the Department requests that PVO also begin monitoring the two streams for hardness.

Spillages

At the meeting, PVO agreed to clean up the contaminated soils in the ~~area surrounding the small buildings near the drop tanks~~ at the south side of the facility. PVO also stated that it

ATTACHMENT E 61

will clean up spillages and contaminated soils surrounding the railroad tracks. Please inform the Department of the date the clean up will begin. Do not cover these areas with clean fill until the Department inspects them.

Drums

PVO agreed to remove all remaining drums containing wastes to an offsite location approved by the Department within thirty (30) days of receipt of this letter.

Tanks

At the meeting PVO agreed to submit to this Department a schedule for the removal to an off-site location approved by the Department all remaining wastes in tanks at the facility, within thirty (30) days of receipt of this letter.

Laboratory Reagents

All laboratory reagents must be segregated into usable and nonusable categories. All nonusable reagents must be removed from the site to an off-site location approved by the Division of Waste Management within six (6) months of receipt of this letter.

Groundwater Monitoring Wells

At the meeting, PVO agreed to install five (5) wells at loca-

tions downgradient of suspected sources of ground water contamination within thirty (30) days of receipt of this letter. The locations of these wells are shown on the attached map.

These wells shall be installed and sampled according to specifications required by the Department. In addition, the elevation of the top of the casings (without caps) shall be surveyed by a licensed surveyor and the elevations tied into the National Geodetic Survey. (Well installation specifications were attached to my previous letter of February 10, 1983). Please give Mr. Daniel Toder of the Division's Geological Survey Element at least one (1) week notice of the drilling date so he may inspect the installation of the wells. Mr. Toder may be reached at (609) 292-0668. The Department will sample these wells initially for the following parameters: pH, volatile organic chemicals, base neutral chemicals, acid extractable chemicals, pesticides, total arsenic, total cadmium, total chromum, total mercury, total nickel, total lead, total zinc, total selenuim, total silver, total barium, total copper, total aluminum, total iron, total organic carbon, chlorides, total dissolved solids, sulfates, color and odor. The Department recommends that PVO collect the well water samples concurrently with the Department for these parameters. Please be advised that based upon the information obtained from these wells, the Department may require further investigation, including the installation of additional wells, if it is needed to fully determine the extent of ground water pollution attributable to PVO.

E3

Miscellaneous

PVO must notify the United States Environmental Protection Agency for hazardous waste activity both as a generator and as a treatment, storage, and disposal facility. Please contact the United States Environmental Protection Agency, Permits Administration Branch at the following address within ten (10) days of receipt of this letter about this matter:

Permits Administration Branch
USEPA, Region II
26 Federal Plaza
Room 432
New York, New York 10278
(212) 264-9880

Finally, you requested clarification concerning acceptable limits of nickel and dieldrin in the ground and surface waters. Appendix F of the regulations concerning the New Jersey Pollutant Discharge Elimination System (N.J.A.C. 7:14A-1 et seq), lists the maximum value allowable for nickel for the protection of aquatic life as 56 parts per billion at a hardness of 50 parts per million. Since the ~~second~~ ground water under the site may be recharging the surface water streams, this may be a limit for on-site ground water at this facility. If future tests indicate that the ground water does not impact the surface water streams, the maximum concentration

E4

of nickel allowable in the ground water must not exceed [redacted] parts per billion to ensure the integrity of the aquifer.

Please be advised that the maximum concentration of dieldrin allowable in surface waters and ground waters is 0.003 parts per billion according to New Jersey Surface Water Quality Standards (N.J.A.C. 7:9-4.1 et seq.) and Ground Water Quality Standards, (N.J.A.C. 7:9-6.1 et seq.).

If you have any questions, please contact Mr. Gregory Cunningham of my staff at (609) 292-0577.

Very truly yours,

Joseph A. Miller
Assistant Chief
Northern Region
Enforcement Element

cc: Joseph M. Mikulka, Chief, Northern Region
Gregory Cunningham
Robert Mueller, Cancer & Toxic Susbtances Research
William Nehls, Bureau of Compliance & Enforcement, DWM
Alphonse Iannuzzi, Bureau of Field Operations, DWM
Steven Austin, Boonton Board of Health
Henry Melenkevitz, Passaic Vegetable Oil
Daniel Toder, Geological Survey Element
Gerald Burke, Regulatory Services
Donald Ganzer, Woodward - Clyde Consultants

bcc: Joseph Miller
Northern Region File THRU JAM
Central File/NPDES, PVO, Boonton Township

~~201 Willowbrook~~
Pacific Vegetable Oil
416 Quidion Avenue
Boonton, NJ 07005

201 Willowbrook Boulevard
P.O. Box 290
Wayne, N.J. 07470

ES

14-01-06

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF WATER RESOURCES
CN 029
TRENTON, NEW JERSEY 08625

JOHN W. GASTON JR., P.E.
DIRECTOR

DIRK C. HOFMAN, P.E.
DEPUTY DIRECTOR

Mr. Tony Yen
Langlan Engineering
299 Market Street
Saddle Brook, New Jersey 07662

FEB 17 1984

Re: PVO International, Inc.
Boonton Town, Morris County

Dear Mr. Yen:

Please find enclosed the water results which the Department collected from two surface water streams and five monitoring wells at the PVO facility in Boonton Town. Information concerning the interpretation of the color and odor results is also enclosed with this letter. Would you kindly send me copies of the results of the water samples collected by Langlan Engineering.

Please be advised that this Department has not yet received the results of the water samples collected from the monitoring wells and analyzed for base neutral and acid extractable chemicals. I shall send you these results as soon as they are received by this Department. At that time, I would also like to arrange a meeting between representatives of this Department and PVO to discuss the results of these samples.

If you have any questions, please contact me at (609) 292-4438.

Very truly yours,

Gregory Cunningham

Gregory Cunningham
Enforcement Unit - Northern Region
Enforcement Element

A20:G9
Enclosure
cc: Joseph M. Mikulka, Chief, Northern Region
William Althoff, Geological Survey Element
Robert Mueller, Office of Science and Research
William Nehls, Bureau of Compliance and Enforcement, Division of Waste Management
Alphonse Iannuzzi, Bureau of Field Operations, Division of Waste Management
Steven Austin, Boonton Town Board of Health
Henry Melenkevitz, PVO International, Inc.
Dennis Krumholz, Esq.

ATTACHMENT F

F1

Form VST-001
7/81

STATE OF NEW JERSEY
Department of Environmental Protection
Water Analysis

Chain of Custody

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

MUNICIPALITY BOONTON	COUNTY MORRIS	STREAM
FACILITY PVO	LOCATION DIVISION STREET	
REPRESENTATIVE EE	TITLE GREGORY (222) CUNNINGHAM	
REMARKS WELL #1		

BACT. LAB NO. _____
DATE REC'D _____
BOTTLE NO. 09392
DATE REC'D. _____
STORET ENT. _____ READ _____

Station Identification Number: SC,

YR. MO DAY: 831219
HOUR: 1450
(1) Sample No. PS,

FIELD ANALYSIS

- ☐ Water Temp. °C. (2) P00010,
- ☐ D.O. - Winkler (3) P00300,
- ☐ D.O. - Probe (4) P00299,
- ☐ pH (Field) (5) P00400,
- ☐ Sample Depth-ft. (6) P00003,
- ☐ Stream Flow-CFS (7) P00061,
- ☐ Gage Height-ft. (8) P00065,
- ☐ Spec. Cond. @ 25 °C (9) P00095,
- ☐ Salinity °/00 (10) P00480,
- ☐ Tide Stage (11) P70211,

CONDITION CODES

- ☐ Weather Conditions (12) P00041,
- ☐ Flow Severity (13) P01351,
- ☐ _____ Severity (14) P013__,
- ☐ _____ Severity (15) P013__,

NUTRIENTS

LEVEL ☐ HIGH ☐ LOW

- ☐ NO_2 - N (16) P00615,
- ☐ $NO_2 + NO_3$ - N (17) P00630,
- ☐ NH_3 - N (18) P00610,
- ☐ Tot. Kjeldahl N (19) P00625,
- Ortho - PO_4 as P ☐ (20) P70507, ☐ (21) P00660,
- Phosphorus-tot as P PO_4 ☐ (22) P00665, ☐ (23) P00650,

BACTERIOLOGICAL – DILUTIONS (REQUESTED)

- Fecal Coliform / Total Coliform
- Fecal Streptococci
- Fecal coli #/100 ml ☐ MPN (24) P31615, ☐ MF (25) P31513,
- ☐ Fecal Strept MPN/100ml (26) P31677,
- ☐ Tot coli MPN/100 ml (27) P31505,

BIOCHEMICAL OXYGEN DEMAND

INITIAL D.O. (lab.) _____ SAMPLE

SEED YES ☐ NO ☐

CONC. %

BOD _____

☐ BOD 5-DAY (38) P310, 6-DAY (29) P312,

- ☐ COD (30) P340,
- ☒ TOC (31) P00680, 6.5

☒ Color Pt - Co	(32) P00080,	5K
☐ Turbidity	(33) P00076,	
☐ Suspended Solids	(34) P00530,	
☐ Suspended Solids Asn	(35) P00540,	
☐ Tot. Solids	(36) P00500,	
☐ Tot. Solids - Ash	(37) P00510,	
☒ Tot. Dissolved Solids (TDS)	(38) P70300,	242

☒ pH (LAB)	(39) P00403,	6.9
☐ Alkalinity as $CaCO_3$	(40) P00410,	
☐ Min. Acidity as $CaCO_3$	(41) P00436,	
☒ Chloride	(42) P00940,	46J
☐ MBAS	(43) P38260,	
☐ Phenols	(44) P32730,	
☐ Hardness - tot as $CaCO_3$	(45) P00900,	
☒ Sulfate	(46) P00945,	48
☐ Oil & Grease	(47) P00556,	
☒ Petroleum Hydrocarbons	(48) P45501,	1K
☐ Cyanide	(49) P00720,	

☒ As - tot ug/l	(50) P01002,	5K
☒ Cd - tot ug/l	(51) P01027,	1K
☒ Cr - tot ug/l	(52) P01034,	5K
☒ Cu - tot ug/l	(53) P01042,	12
☒ Fe - tot ug/l	(54) P01045,	3085
☒ Hg - tot ug/l	(55) P71900,	0.5K
☐ Mn - tot ug/l	(56) P01055,	
☒ Ni - tot ug/l	(57) P01067,	284
☒ Pb - tot ug/l	(58) P01051,	10K
☒ Zn - tot ug/l	(59) P01092,	40

ADDITIONAL ANALYSIS

☒ Selenium	P _____,	0.003K
☒ SILVER	P _____,	0.010K
☒ BARIUM	P _____,	0.040K
☒ Aluminum	P _____,	2.041
☒ ODOR	P IM,	

RESULTS mg/l unless otherwise noted

Chemist Review _____

REPORT SUBMITTED

JAN 25 1984

NJDOH Environmental Chemistry

Part 1 (White) - Water Quality Inventory Copy
Part 2 (Canary) - Laboratory Copy
Part 3 (Pink) Laboratory Copy
Part 4 (Goldenrod) - Field Samplers Copy

Form VST-001
7/81

STATE OF NEW JERSEY
Department of Environmental Protection
Water Analysis

Chain of Custody

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

MUNICIPALITY BOONTON	COUNTY MORRIS	STREAM
FACILITY PVO	LOCATION DIVISION STREET	
REPRESENTATIVE EE	TITLE	CERTIFIED BY GREGORY (222) CUNNINGHAM
REMARKS WELL #2		

BACT. LAB NO. _____
DATE REC'D _____
BOTTLE NO. 04393
DATE REC'D. _____
STORET ENT. _____ READ _____

Station Identification Number: SC,

YR. MO. DAY: 831219

HOUR: 1115

(1) P8,

Sample No.:

FIELD ANALYSIS

- ☐ Water Temp. °C. (2) P00010,
- ☐ D.O. - Winkler (3) P00300,
- ☐ D.O. - Probe (4) P00299,
- ☐ pH (Field) (5) P00400,
- ☐ Sample Depth-ft. (6) P00003,
- ☐ Stream Flow-CFS (7) P00061,
- ☐ Gage Height-ft. (8) P00065,
- ☐ Spec. Cond. @ 25°C (9) P00095,
- ☐ Salinity °/00 (10) P00480,
- ☐ Tide Stage (11) P70211,

CONDITION CODES

- ☐ Weather Conditions (12) P00041,
- ☐ Flow Severity (13) P01351,
- ☐ _____ Severity (14) P013__,
- ☐ _____ Severity (15) P013__,

NUTRIENTS

LEVEL ☐ HIGH ☐ LOW

- ☐ NO_2 - N (16) P00615,
- ☐ $NO_2 + NO_3$ - N (17) P00630,
- ☐ NH_3 - N (18) P00610,
- ☐ Tot. Kjeldahl N (19) P00625,
- Ortho - PO_4 as P ☐ (20) P70507, ☐ (21) P00660,
- Phosphorus-tot as P PO_4 ☐ (22) P00665, ☐ (23) P00650,

BACTERIOLOGICAL – DILUTIONS (REQUESTED)

Fecal Coliform								
Total Coliform	10	1	$\frac{1}{10}$	$\frac{1}{10^2}$	$\frac{1}{10^3}$	$\frac{1}{10^4}$	$\frac{1}{10^5}$	$\frac{1}{10^6}$
Fecal Streptococci	10	1	$\frac{1}{10}$	$\frac{1}{10^2}$	$\frac{1}{10^3}$	$\frac{1}{10^4}$	$\frac{1}{10^5}$	$\frac{1}{10^6}$

- Fecal coli #100 ml ☐ MPN (24) P31615, ☐ MF (25) P31613,
- ☐ Fecal Strept MPN/100ml (26) P31677,
- ☐ Tot coli MPN/100 ml (27) P31505,

BIOCHEMICAL OXYGEN DEMAND

INITIAL D.O. (lab.) _____ SAMPLE

SEED YES ☐ NO ☐

CONC. %

BOD _____

☐ BOD 5-DAY (28) P310, 6-DAY (29) P312,

- ☐ COD (30) P340,
- ☒ TOC (31) P00680, 36

☒ Color Pt - Co	(32) P00080,	5K
☐ Turbidity	(33) P00076,	
☐ Suspended Solids	(34) P00530,	
☐ Suspended Solids Ash	(35) P00540,	
☐ Tot. Solids	(36) P00500,	
☐ Tot. Solics - Ash	(37) P00510,	
☒ Tot. Dissolved Solids (TDS)	(38) P70300,	724

☒ pH (LAB)	(39) P00403,	7.4
☐ Alkalinity as $CaCO_3$	(40) P00410,	
☐ Min. Acidity as $CaCO_3$	(41) P00436,	
☒ Chloride	(42) P00940,	54J
☐ MBAS	(43) P38260,	
☐ Phenols	(44) P32730,	
☐ Hardness - tot as $CaCO_3$	(45) P00900,	
☒ Sulfate	(46) P00945,	199
☐ Oil & Grease	(47) P00556,	
☒ Petroleum Hydrocarbons	(48) P45501,	1K
☐ Cyanide	(49) P00720,	

☒ As - tot ug/l	(50) P01002,	10
☒ Cd - tot ug/l	(51) P01027,	1K
☒ Cr - tot ug/l	(52) P01034,	22
☒ Cu - tot ug/l	(53) P01042,	69
☒ Fe - tot ug/l	(54) P01045,	27700 *
☒ Hg - tot ug/l	(55) P71900,	0.5K
☐ Mn - tot ug/l	(56) P01055,	
☒ Ni - tot ug/l	(57) P01067,	62
☒ Pb - tot ug/l	(58) P01051,	17 *
☒ Zn - tot ug/l	(59) P01092,	96

ADDITIONAL ANALYSIS

☒ Selenium	P _____,	0.003K
☒ SILVER	P _____,	0.010K
☒ BARIUM	P _____,	0.144
☒ Aluminum	P _____,	11.80
☒ ODOR	P TILC,	

RESULTS mg/l unless otherwise noted

REPORT SUBMITTED

Chemist Review _____ JAN 25 1984

NJDOH Environmental Chemistry Laboratory

D2

Part 1 (White) - Water Quality Inventory Copy
Part 2 (Canary) - Laboratory Copy
Part 3 (Pink) - Laboratory Copy
Part 4 (Goldenrod) - Field Sampling Copy

Form VST-001
7/81

STATE OF NEW JERSEY
Department of Environmental Protection
Water Analysis

Chain of Cust

PLEASE TYPE OR PRINT WITH BALLPOINT PEN

MUNICIPALITY BOONTON	COUNTY MORRIS	STREAM REFCE
FACILITY PVO	LOCATION DIVISION Avenue	
REPRESENTATIVE EE	TITLE	COLL NAME GREGORY (222)
REMARKS Well #5		CUNNINGHAM DIV WATER MS&E

BACT. LAB NO. _____
DATE REC'D. _____
BOTTLE NO. 0939
DATE REC'D. _____
STORET ENT. _____ READ _____

Station Identification Number: SC,

YR. MO. DAY: 831219

HOUR: 1315.

(1) Sample No.: P8,

FIELD ANALYSIS

- ☐ Water Temp. °C. (2) P00010,
- ☐ D.O. - Winkler (3) P00300,
- ☐ D.O. - Probe (4) P00299,
- ☐ pH (Field) (5) P00400,
- ☐ Sample Depth-ft. (6) P00003,
- ☐ Stream Flow-CFS (7) P00061,
- ☐ Gage Height-ft. (8) P00065,
- ☐ Spec. Cond. @ 25 °C (9) P00095,
- ☐ Salinity °/00 (10) P00480,
- ☐ Tide Stage (11) P70211,

CONDITION CODES

- ☐ Weather Conditions (12) P00041,
- ☐ Flow Severity (13) P01351,
- ☐ _____ Severity (14) P013__,
- ☐ _____ Severity (15) P013__,

NUTRIENTS

LEVEL ☐ HIGH ☐ LOW

- ☐ NO_2 - N (16) P00615,
- ☐ $NO_2 + NO_3$ - N (17) P00630,
- ☐ NH_3 - N (18) P00610,
- ☐ Tot. Kjeldahl N (19) P00625,
- Ortho - PO_4 as P ☐ (20) P70507, ☐ (21) P00660,
- Phosphorus - tot as P PO_4 ☐ (22) P00665, ☐ (23) P00650,

BACTERIOLOGICAL – DILUTIONS (REQUESTED)

Fecal Coliform	10	1	-1 10	-2 10	-3 10	-4 10	-5 10	-6 10
Total Coliform	10	1	-1 10	-2 10	-3 10	-4 10	-5 10	-6 10
Fecal Streptococci	10	1	-1 10	-2 10	-3 10	-4 10	-5 10	-6 10

- Fecal coli #100 ml ☐ MPN (24) P31615, ☐ MF (25) P31613,
- ☐ Fecal Strept MPN/100ml (26) P31677,
- ☐ Tot coli MPN/100 ml (27) P31505,

BIOCHEMICAL OXYGEN DEMAND

INITIAL D.O. (lab.)_____ SAMPLE

SEED YES ☐ NO ☐

CONC. % | BOD__

- ☐ BOD 5-DAY(28) P310, 6-DAY(29) P312,
- ☐ COD (30) P340,
- ☒ TOC (31) P00680, 24

☒ Color Pt - Cou	(32) P00080,	140
☐ Turbidity	(33) P00076,	
☐ Suspended Solids	(34) P00530,	
☐ Suspended Solids Ash	(35) P00540,	
☐ Tot. Solids	(36) P00500,	
☐ Tot. Solids - Ash	(37) P00510,	
☒ Tot. Dissolved Solids (TDS)	(38) P70300,	3368

☒ pH (LAB)	(39) P00403,	6.4
☐ Alkalinity as $CaCO_3$	(40) P00410,	
☐ Min. Acidity as $CaCO_3$	(41) P00436,	
☒ Chloride	(42) P00940,	30J
☐ MBAS	(43) P38260,	
☐ Phenols	(44) P32730,	
☐ Hardness - tot as $CaCO_3$	(45) P00900,	
☒ Sulfate	(46) P00945,	2515
☐ Oil & Grease	(47) P00556,	
☒ Petroleum Hydrocarbons	(48) P45501,	1K
☐ Cyanide	(49) P00720,	

☒ As - tot ug/l	(50) P01002,	5K
☒ Cd - tot ug/l	(51) P01027,	1K
☒ Cr - tot ug/l	(52) P01034,	15
☒ Cu - tot ug/l	(53) P01042,	19
☒ Fe - tot ug/l	(54) P01045,	1369
☒ Hg - tot ug/l	(55) P71900,	0.5K
☐ Mn - tot ug/l	(56) P01055,	
☒ Ni - tot ug/l	(57) P01067,	3320
☒ Pb - tot ug/l	(58) P01051,	10K
☒ Zn - tot ug/l	(59) P01092,	68

ADDITIONAL ANALYSIS

☒ Selenium	P_____,	0.003K
☒ SILVER	P_____,	0.010K
☒ BARIUM	P_____,	0.044
☒ Aluminum	P_____,	0.887
☒ ODOR	P IG,	

RESULTS mg/l unless otherwise noted

REPORT SUBMITTED

Chemist Review _____ JAN 25 1984

Part 1 (White) - Water Quality Inventory Copy
Part 2 (Canary) - Laboratory Copy
Part 3 (Pink) - Laboratory Copy
Part 4 (Goldenrod) - Field Sampler Copy

NJDOH Environmental Chemistry Laboratory

F4

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL LABORATORIES
QUANTITATIVE RESULTS & QUALITY ASSURANCE DATA

LAB. CONTROL #: 1306
SAMPLE TYPE: Water
FIELD SAMPLE #: 09417

REPORT DATE: 12/28/83
SECTION SUPERVISOR: MI
LAB. SUPERVISOR: [signature]

PARAMETER	RESULTS SAMPLE DATA		QUALITY CONTROL DATA				
				LAB. DUPLICATE		MATRIX SPIKE	
Pesticide/PCBs	SAMPLE CONCEN. µg/1	MDL µg/1	METHOD BLANK µg/1	LAB. DUP. µg/1	% DIFF.	CONCEN. ADDED µg/1	% RECOV.
ldrin	N.D.	0.004	N.D.	N.D.			
α-BHC		0.003					
-BHC		0.006					
δ-BHC		0.009					
-BHC		0.004					
Chlordane	↓	0.014		↓			
,4'-DDD	0.027	0.011		0.034	11.5		
-DDE	N.D	0.004		N.D			
4,4'-DDT	N.D.	0.012		N.D			
Dieldrin	0.356	0.002		0.365	1.2		
Endosulfan I	N.D.	0.014					
Endosulfan II		0.004					
Endosulfan sulfate		0.066					
Endrin		0.006					
Endrin aldehyde		0.023					
Heptachlor		0.003					
Heptachlor epoxide		0.004					
Toxaphene	↓	0.24	↓	↓			
PCB-1016		0.088					
PCB-1221		0.129					
PCB-1232		0.060					
PCB-1242		0.072					
PCB-1248		0.072					
PCB-1254		0.112					
-1260		0.089					

F5

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
BUREAU OF ENVIRONMENTAL LABORATORIES
QUANTITATIVE RESULTS & QUALITY ASSURANCE DATA

CONTROL #: 1456
SAMPLE TYPE: WATER
FIELD SAMPLE #: 04393

REPORT DATE: DEC 28 1983
SECTION SUPERVISOR: TF
LAB. SUPERVISOR:

PARAMETER	RESULTS			QUALITY CONTROL DATA			
	SAMPLE DATA			LAB. DUPLICATE		MATRIX SPIKE	
HALOGENATED AND AROMATIC VOLATILES	SAMPLE CONCEN. µg/l	MDL µg/l	METHED BLANK µg/l	LAB. DUP. µg/l	% DIFF.	ADDED µg/l	% RECOV.
Bromodichloromethane	ND	1.0	ND				
Bromoform							
Bromomethane							
Carbon tetrachloride	15.8						
Chlorobenzene	185.6						
Chloroethane							
2-Chloroethylvinyl ether							
Chloroform	3.4						
Chloromethane							
Dibromochloromethane							
1,2-Dichlorobenzene	92.4						
1,3-Dichlorobenzene	6.9						
1,4-Dichlorobenzene	34.5						
Dichlorodifluoromethane							
1,1-Dichloroethane	3.7						
1,2-Dichloroethane							
1,1-Dichloroethene							
trans-1,2-Dichloroethene							
1,2-Dichloropropane							
cis-1,3-Dichloropropene							
trans-1,3-Dichloropropene							
Methylene chloride							
1,1,2,2-tetrachloroethane							
Tetrachloroethene							
1,1,1-Trichloroethane							
1,1,2-Trichloroethane							
Trichloroethene							
Trichlorofluoromethane							
Vinyl Chloride							
Benzene							
Ethylbenzene							
Toluene	↓	↓	↓				

F6

BU[illegible] OF ENVIRONMENTAL LABORATORIES
QUANTITATIVE RESULTS & QUALITY ASSURANCE DATA

CONTROL #: 1457
TYPE: WATER
SAMPLE #: 09394

REPORT DATE: Dec 28, 1983
SECTION SUPERVISOR:
LAB. SUPERVISOR:

PARAMETER	RESULTS			QUALITY CONTROL DATA			
	SAMPLE DATA			LAB. DUPLICATE		MATRIX SPIKE	
HALOGENATED AND AROMATIC VOLATILES	SAMPLE CONCEN. ug/l	MDL ug/l	METHED BLANK ug/l	LAB. DUP. ug/l	% DIFF.	ADDED ug/l	% RECOV.
	ND	1.0	ND				
Bromodichloromethane							
Bromoform							
Bromomethane							
Carbon tetrachloride							
Chlorobenzene	336						
Chloroethane							
2-Chloroethylvinyl ether							
Chloroform							
Chloromethane							
Dibromochloromethane							
1,2-Dichlorobenzene	308						
1,3-Dichlorobenzene	66.4						
1,4-Dichlorobenzene	137						
Dichlorodifluoromethane							
1,1-Dichloroethane	14.6						
1,2-Dichloroethane	37.6						
1,1-Dichloroethene							
trans-1,2-Dichloroethene							
1,2-Dichloropropane							
cis-1,3-Dichloropropene							
trans-1,3-Dichloropropene							
Methylene chloride							
1,1,2,2-tetrachloroethane							
Tetrachloroethene							
1,1,1-Trichloroethane	6.6						
1,1,2-Trichloroethane							
Trichloroethene	35.8						
Trichlorofluoromethane							
Vinyl Chloride							
Benzene	16.3						
Ethylbenzene							
Toluene							

[illegible] copy Pink - Sample Custodian Gold - Sample Receipt

F2

QUANTITATIVE

CONTROL #: 1459

LE TYPE: WATER

SAMPLE #: 09396

REPORT DATE: 12/23/83

SECTION SUPERVISOR: TJ

LAB. SUPERVISOR:

PARAMETER	RESULTS			QUALITY CONTROL DATA			
	SAMPLE DATA			LAB. DUPLICATE MATRIX SPIKE			
ALOGENATED AND AROMATIC VOLATILES	SAMPLE CONCEN. µg/l	MDL µg/l	METHED BLANK µg/l	LAB. DUP. ug/l	% DIFF.	ADDED ug/l	% RECOV.
	ND	1.0	ND				
romodichloromethane							
Bromoform							
romomethane							
Carbon tetrachloride	8.5						
Chlorobenzene							
Chloroethane							
2-Chloroethylvinyl ether	37.4						
Chloroform							
Chloromethane							
Dibromochloromethane							
1,2-Dichlorobenzene							
1,3-Dichlorobenzene							
4-Dichlorobenzene							
Dichlorodifluoromethane							
1,1-Dichloroethane							
1,2-Dichloroethane							
1,1-Dichloroethene							
trans-1,2-Dichloroethene							
1,2-Dichloropropane							
cis-1,3-Dichloropropene							
trans-1,3-Dichloropropene							
Methylene chloride	10.1						
1,1,2,2-tetrachloroethane							
Tetrachloroethene							
1,1,1-Trichloroethane							
1,1,2-Trichloroethane							
Trichloroethene							
Trichlorofluoromethane							
Vinyl Chloride							
Benzene							
Ethylbenzene	↓	↓	↓	↓			
Toluene							

COPIES: White - Data File Canary - Data File (client's copy) Pink - Sample Custodian Gold - Sample Receipt

F8

14-01-06

ADM-012

MEMO

NEW JERSEY STATE DEPARTMENT OF ENVIRONMENTAL PROTECTION

TO Richard Katz, Bureau of Industrial Site Evaluation, Division of Waste Management

FROM Joseph M. Mikulka, Chief, Northern Region, Enforcement Element, Division of Water Resources DATE DEC 12 1984

SUBJECT PVO International, Inc.
Boonton Township, Morris County

PVO International, Inc. (PVO) operated a manufacturing facility in Boonton Township from 1971 to early 1980. At the Boonton plant, PVO manufactured vegetable oils, hard butter, shortening, margarine, and chemical specialties for pharmaceuticals and cosmetics. The production of edible goods was transferred to another location in 1975. In 1980, Kay Corporation brought the property and ceased all operations of the facility. Kay Corporation then began demolishing the plant. Kay Corporation plans to sell the property at the completion of the demolition.

In a letter dated August 1, 1984, the Region informed Dennis Krumholz, Esq. (legal representative for Kay Corporation) that if the Boonton facility is sold, the facility may be subject to requirements of the ECRA Act. On November 7, 1984, the Region received an Environmental Clean-up Plan for the PVO site from Dennis Krumholz. Although the Plan stated that the property will be sold, Mr. Krumholz did not send your Bureau a copy of the plan. During a telephone conversation on November 9, 1984, Mr. Krumholz informed this Region that the PVO facility may fall within Category 20 and therefore would not fall under the ECRA statutes.

The purpose of this memorandum is to inform you of these facts so your Bureau can take the necessary actions. For your information, the results of water samples collected by this Division indicate that the soil, ground and surface water at the site is contaminated with hazardous substances. At your request, the Region can provide you with a copy of the Clean-up Plan.

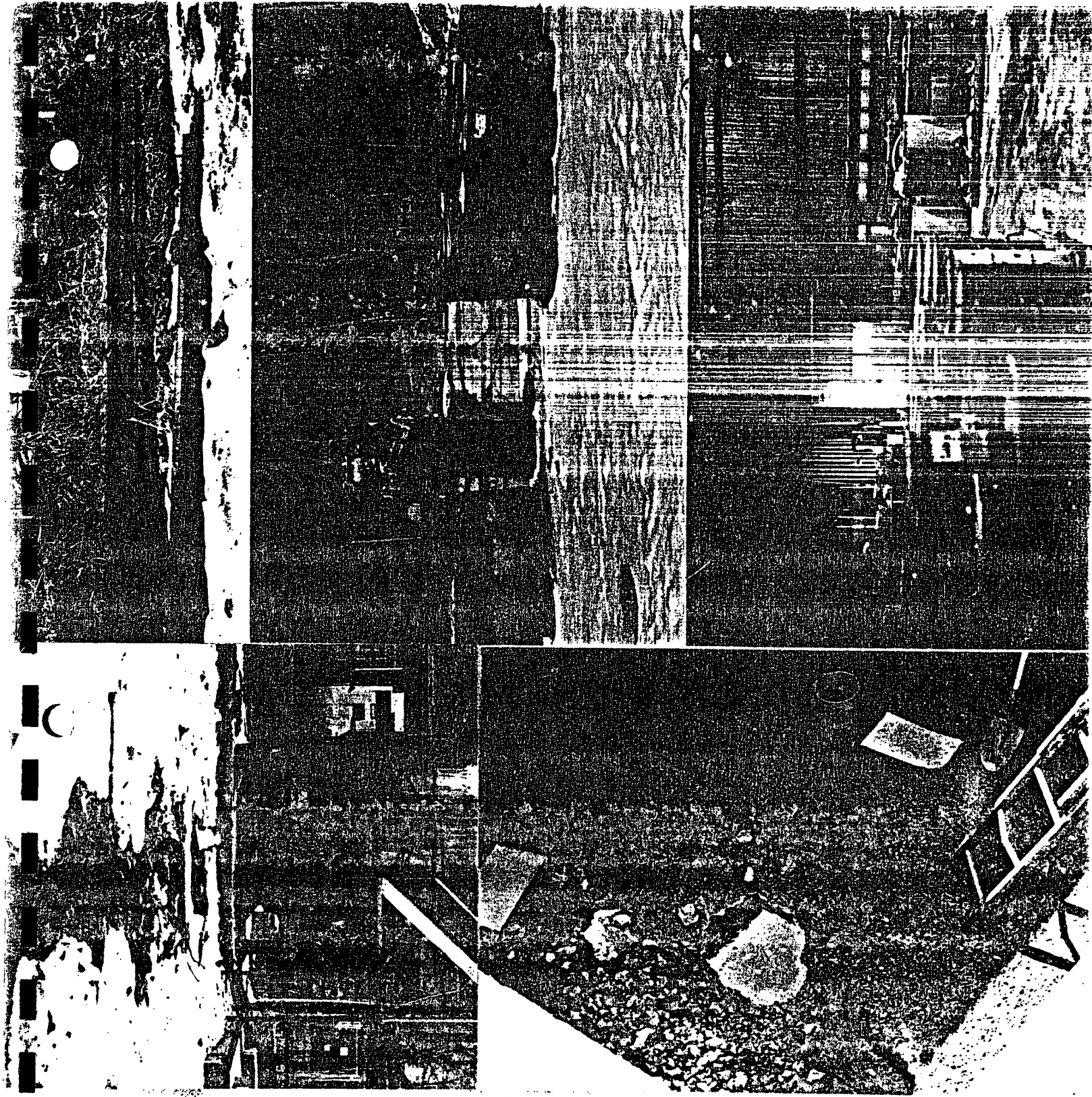
Please keep the Region informed of any actions and/or decisions your Bureau makes concerning this facility. If you have any questions, please contact Mr. Gregory Cunningham, of my staff, at 2-4438.

A20:sv

cc: Gregory Cunningham
Lisa Mirmanesh, NJ Geological Survey Element
Matthew Bigalow, Bureau of Compliance & Field Operations, DWM
Robert Mueller, Office of Science and Research
Joseph Douglas, Bureau of Industrial Site Evaluation, DWM

ATTACHMENT G

G1



G2

MALCOLM PIRNIE

OFF - SITE RECONNAISSANCE

Date: February 7, 1985 Time In 1:00 pm Out 2:30 pm

Site ID No. 124 /~~126~~

Site Name: Pacific Vegetable Oil

Location: North and South of Division St.

Address: 416 Division St.

City, County Boonton, Morris Zip: 07005

Personnel: Thomas Fowler Title: Project Hydrogeologist
Edward Enright Engineer

Conditions: Clear, Snow covering ground Temperature: 30°F

Any evidence of imminent hazard? no Illegal Dumping? no

Uncapped Monitoring Wells? no If Yes, Notify NJDEP

Signature: Edward J Enright Date: 2-7-85

Witness: Tom Fowler Date: 2/7/85

Site: Pacific Vegetable Oil Site ID No. 124/~~126~~

Date: February 7, 1985

North side of street inspected first. Remnants of demolished buildings in several locations on site. Storage tanks in several locations - none appear to be leaking. Drums seen on site, in front of 20' tall steel tank. Appears that drums are tightly closed and in good condition. Various materials (old cable reels, etc.) are stored in rear of main building - none appear to be associated with chemical processes. Appears limited operation in progress. (few cars at site) Capped well on North east side of site. Drums also in front of plant building, Old but not leaking.

South side - spruce street extended - yellow "salvage" drums on loading dock. Appear in good conditions but brown streaks down sides. Two foundations of demolished buildings existing. No other problems noted. No activities apparent in any buildings on south side of Division St. Ground on both sides of street covered with deep snow - no signs of footprints or attempts to clear snow. One foundation has recent excavation made within walls (Backhoe on site)

Signature: Edward J. Enright Date: 2-7-85

Witness: Tom Fowler Date: 2/7/85

MALCOLM PIRNIE

PHOTO LOG

Subject: Pacific Vegetable Oil Site ID No. 124/~~126~~

Date: February 7, 1985 Page No. 1

ASA: 100

Frame No:	Object photographed:*	Location of photographer:*	Compass heading:
(Roll # 1)			
12	General, of site	Spruce St	Northeast
13	General, of site	Spruce St.	East
14	Capped well	Wooton St.	Southwest.
15	Drums on Loading dock.	Division St.	Southeast
16	PVO Building	Division St	Northwest

*Indicate on sketch or map if possible

Signature: Edward J Enright Date: 2-7-85

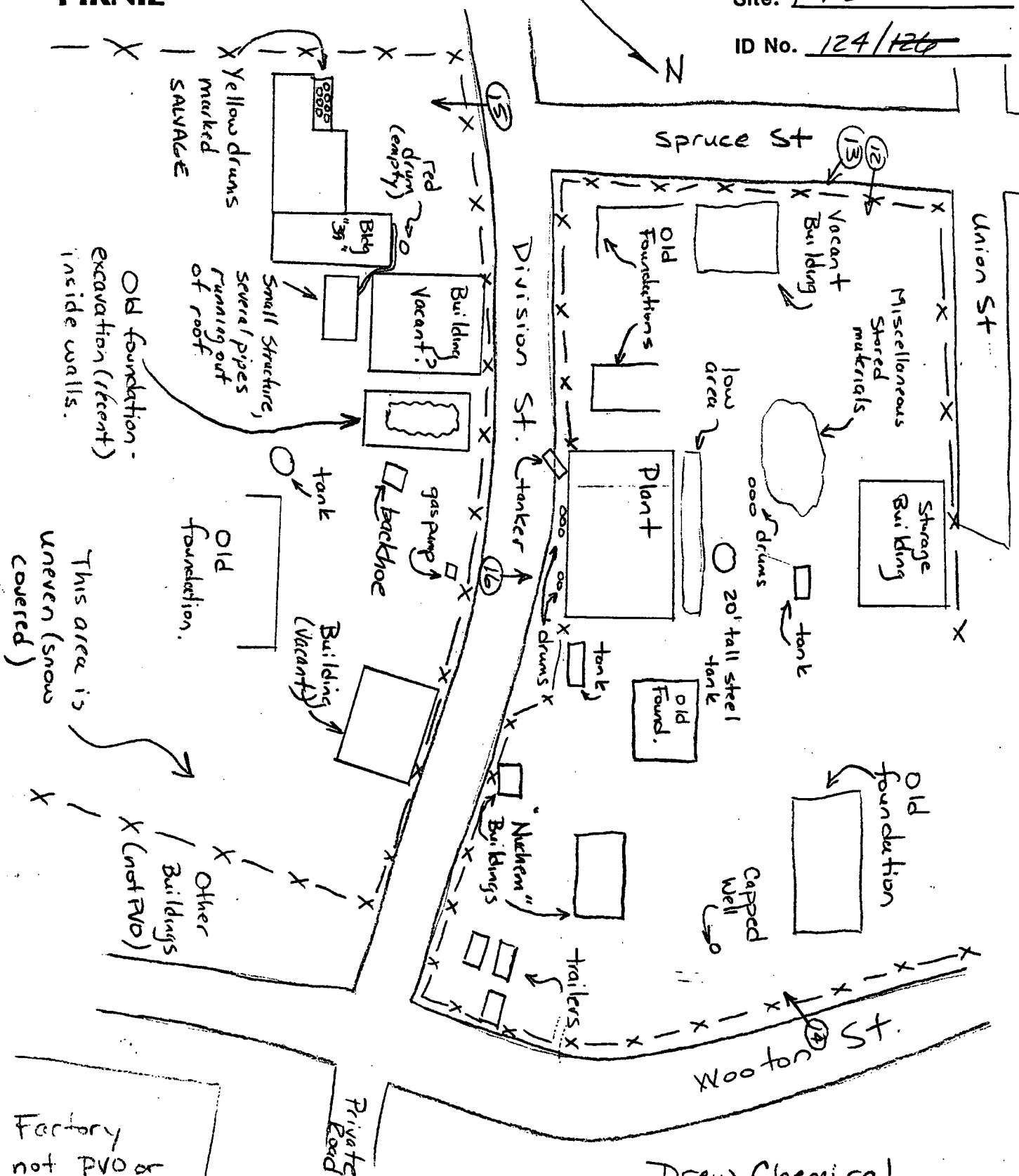
Witness: Tom Fowler Date: 2/7/85

MALCOLM PIRNIE

MAPS AND SKETCHES

Site: PVO

ID No. 124/~~126~~



Drew Chemical

Signature: Edward S. Fawcett

Date: 2-7-85

Witness: Tom Fuller

Date: 2/7/85

MALCOLM PIRNIE

Preliminary Assessment Photo Log

SITE: PACIFIC VEGETABLE OIL

I.D. 124/126

DATE: FEB. 7, 1985

FRAME: 12 TIME: 1:15 P.M. DIRECTION: N.E.

DESCRIPTION: GENERAL VIEW OF SITE

FRAME: 13 TIME: 1:20 P.M. DIRECTION: E.

DESCRIPTION: GENERAL VIEW OF SITE

MALCOLM PIRNIE

Preliminary Assessment Photo Log

SITE: PACIFIC VEGETABLE OIL

I.D. 124/126

DATE: FEB. 7, 1985

FRAME: 14 TIME: 1:30 P.M. DIRECTION: S.W.

DESCRIPTION: CAPPED WELL

FRAME: 15 TIME: 1:45 P.M. DIRECTION: S.E.

DESCRIPTION: DRUMS ON LOADING DOCK

MALCOLM PIRNIE

Preliminary Assessment Photo Log

SITE: PACIFIC VEGETABLE OIL

I.D. 124/126

DATE: FEB. 7, 1985

FRAME: 15 TIME: 2:10 P.M. DIRECTION: N.E.

DESCRIPTION: PVO BUILDING

FRAME: _____ TIME: _____ DIRECTION: _____

DESCRIPTION: _____

MALCOLM PIRNIE

SITE NAME: PACIFIC VEG OIL

ID NO: 126

LOCATION: BOONTON BORO
MORRIS CO.

FILE	SEARCH DATE	REVIEWER	RCRA 3001 FORM	CERCLA 103C FORM	PRELIMINARY INSP. REPORT	FIELD INSPECTION REPORTS	AGENCY INTERNAL MEMOS	RESP. PARTY CORRESPONDENCE	FORMAL REPORTING DOCUMENTS	SITE SKETCHES	ANALYTICAL DATA	SECOND SEARCH DATE	REMARKS	QA CHECK
HSMA	2/4/85	P.K.			✓	✓		✓	✓					

CODES:

- ✓ REVIEWED AND COPIED
- X REVIEWED BUT NOT COPIED
- NF NOT FOUND
- NA NOT APPROPRIATE

MALCOLM PIRNIE

SITE NAME: PACIFIC VEGETABLE OIL INTERNATIONAL

ID NO: 14-01-06

LOCATION: BOONTON
MORRIS CO.

FILE	SEARCH DATE	REVIEWER	RCRA 3001 FORM	CERCLA 103C FORM	PRELIMINARY INSP. REPORT	FIELD INSPECTION REPORTS	AGENCY INTERNAL MEMOS	RESP. PARTY CORRESPONDENCE	FORMAL REPORTING DOCUMENTS	SITE SKETCHES	ANALYTICAL DATA	SECOND SEARCH DATE	REMARKS	QA CHECK
NJDEP DWM	1-31-85	MANOJ S. SHAH (ST)	NF	NF	NF	✓	✓	NF	NF	✓	✓			

CODES:

✓ REVIEWED AND COPIED
X REVIEWED BUT NOT COPIED
NF NOT FOUND
NA NOT APPROPRIATE

1 of 1
124